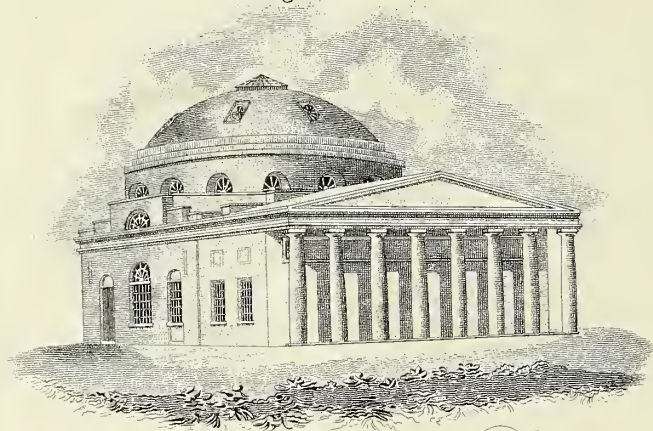






CT 29 1943

LIBRARY  
OF THE  
School of Medicine



University of Maryland

HEALTH SCIENCES LIBRARY  
UNIVERSITY OF MARYLAND  
BALTIMORE


















Digitized by the Internet Archive  
in 2016

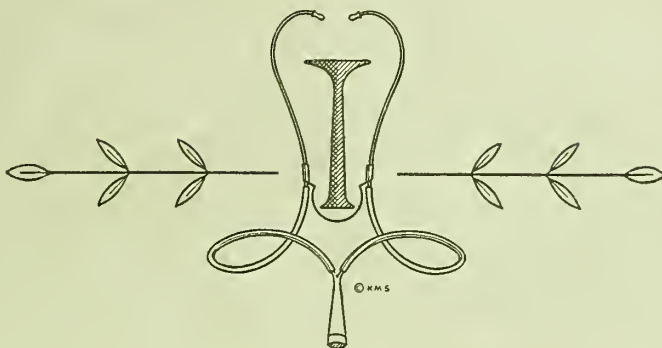
<https://archive.org/details/journalofkansasm3911kans>



# THE JOURNAL

of the

# Kansas Medical Society



## JANUARY 1938

- THE EFFECTS OF BENZEDRINE SULFATE SOLUTION ON  
CYCLOPLEGIA—Lyle S. Powell, M.D., Lawrence, Kansas, and  
Marshall E. Hyde, M.D., Osawatomie, Kansas . . . . . 1
- MALIGNANT HYPERTENSION—Maurice Snyder, M.D., Salina,  
Kansas . . . . . 4
- MODERN DRUG THERAPY—Robert M. Isenberger, M.D.,  
Kansas City, Kansas . . . . . 8
- UNCONTROLLABLE HEMORRHAGE FROM BENIGN PROS-  
TATIC ENLARGEMENT—W. M. Mills, M.D., and O. R. Clark,  
M.D., Topeka, Kansas . . . . . 12
- PURE FOOD AND DRUG ACT—Hon. Edward H. Rees, Em-  
poria, Kansas . . . . . 13
- FRACTURES OF THE LOWER MARGIN OF THE ORBIT—  
A. C. Eitzen, M.D., Hillsboro, Kansas . . . . . 15

VOLUME XXXIX

NUMBER 1

79th Annual Session—Wichita, May 9, 10, 11, 12



# Why Cosmetics?



## Because . . .

*It is woman's nature to make the most of her appearance . . .*

Because, carefully selected and intelligently used, cosmetics keep a woman looking her best . . .

Because the knowledge that one's appearance is pleasing has a great deal to do with a healthy attitude towards life . . .

And because the chances are that you yourself, Doctor, perhaps without realizing it, appreciate the many little highlights of charm that cosmetics impart.

## So . . .

*Why not encourage your patients to take an interest in their appearance?*

Because LUZIER REPRESENTATIVES are trained to help their patrons select suitable cosmetics they can be of indirect service to you and of direct service to your patients.

---

**LUZIER'S, INC., MAKERS OF FINE COSMETICS & PERFUMES**

---

KANSAS CITY, MO.

27145

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

JANUARY, 1938

Number 1

## THE EFFECTS OF BENZEDRINE SULFATE SOLUTION ON CYCLOPLEGIA

### A PRELIMINARY REPORT†

Lyle S. Powell, M.D.\*

Lawrence, Kansas

Marshall E. Hyde, M.D.\*\*

Osawatomie, Kansas

Due to the economic aspects of the situation when homatropine cycloplegia is used, an unending search has been in progress for a satisfactory drug which would give complete cycloplegia in a short time with a more rapid recovery than in the case of homatropine.

Stimulated by the recent preliminary report of the use of benzedrine sulfate (benzyl methyl carbinamine sulfate S.K.F.) as a cycloplegic<sup>1</sup>, the following studies have been undertaken combining the use of one-fourth of one per cent benzedrine sulphate solution with two per cent homatropine solution. In each case two drops of benzedrine sulfate solution one-fourth of one per cent were instilled in each conjunctival sac and followed in three minutes by two drops of two per cent homatropine solution. Pupillary size was measured and accommodation was measured with a Prince rule and by the use of Jaeger test type.

Table I gives the results obtained in a group of six patients ranging from sixteen to thirty-one years of age in whose eyes benzedrine sulfate and homatropine were both used. The size of the pupil and the amount of accommodation present were noted and recorded before using the drops and one-half hour, one hour, two hours, four hours, and eight hours after using them. In this study, if the patient reads less than J7 or shows less than 2D of accommodation on the Prince rule complete cycloplegia is assumed and is indicated in the tables by JO and O respectively. Data obtained in this first small

group where benzedrine and homatropine were used together is as follows:

TABLE I

	Before Instillation	One-half hour after Instillation	One hour after Instillation	Two hours after Instillation	Four hours after Instillation	Eight hours after Instillation	Eighteen hours after Instillation.
<b>J.R.</b>							
Near R.....	J2.....	J3.....	J0.....	J0.....	J6.....	J1.....	J1.....
L.....	J2.....	J2.....	J0.....	J0.....	J6.....	J1.....	J1.....
Accommo-R.....	5.5D.....	0.....	0.....	0.....	0.....	6D.....	6.5D.....
dation L.....	5.5D.....	0.....	00.....	0.....	0.....	5.5D.....	7D.....
Pupil Size .....	4mm.....	9mm.....	9mm.....	9mm.....	9mm.....	8mm.....	5mm.....
<b>J.G.</b>							
Near R.....	J1.....	J6.....	J0.....	J0.....	J3.....	J1.....	J1.....
L.....	J1.....	J7.....	J0.....	J0.....	J0.....	J1.....	J1.....
Accommo-R.....	8.5D.....	0.....	0.....	0.....	0.....	6.5D.....	7.5D.....
dation L.....	8D.....	0.....	0.....	0.....	0.....	4.5D.....	7.5D.....
Pupil Size .....	4mm.....	8mm.....	8mm.....	8mm.....	7mm.....	7mm.....	4mm.....
<b>G.T.</b>							
Near R.....	J1.....	J2.....	J0.....	J0.....	J0.....	J2.....	J1.....
L.....	J1.....	J6.....	J0.....	J0.....	J0.....	J2.....	J1.....
Accommo-R.....	7D.....	0.....	0.....	0.....	0.....	0.....	5.5D.....
dation L.....	7.5D.....	0.....	0.....	0.....	0.....	0.....	5D.....
<b>F.B.</b>							
Near R.....	J1.....	J3.....	J0.....	J0.....	J1.....	J1.....	J1.....
L.....	J3.....	J0.....	J0.....	J0.....	J0.....	J4.....	J2.....
Accommo-R.....	7D.....	0.....	0.....	0.....	0.....	0.....	7D.....
dation L.....	6D.....	0.....	0.....	0.....	0.....	0.....	0.....
Pupil Size .....	3mm.....	8mm.....	8mm.....	7mm.....	7mm.....	6mm.....	5mm.....
<b>G.S.</b>							
Near R.....	J1.....	J0.....	J0.....	J0.....	J0.....	J2.....	J1.....
L.....	J1.....	J0.....	J0.....	J0.....	J0.....	J2.....	J1.....
Accommo-R.....	7D.....	0.....	0.....	0.....	0.....	0.....	7D.....
dation L.....	9D.....	0.....	0.....	0.....	0.....	0.....	9D.....
Pupil Size .....	6mm.....	8mm.....	8mm.....	8mm.....	8mm.....	7mm.....	6mm.....
<b>W.W.</b>							
Near R.....	J1.....	J3.....	J3.....	J2.....	J2.....	J1.....	J1.....
L.....	J1.....	J3.....	J3.....	J3.....	J3.....	J1.....	J1.....
Accommo-R.....	11D.....	0.....	0.....	0.....	2D.....	3D.....	8D.....
dation L.....	11D.....	0.....	0.....	0.....	2D.....	2.5D.....	9D.....
Pupil Size .....	4mm.....	8mm.....	8mm.....	8mm.....	8mm.....	8mm.....	5mm.....

Table II gives the effect of homatropine alone on the size of the pupil and the amount and duration of cycloplegia as well as the time of maximum cycloplegia. These six patients come within the 16 to 31 year age range. In this group two drops of a two per cent solution of homatropine were instilled in each conjunctival sac every five minutes until four instillations were given.

†From the Department of Ophthalmology, Osawatomie State Hospital.

\*Consulting Ophthalmologist to the Osawatomie State Hospital.

\*\*Staff Physician, Osawatomie State Hospital.



TABLE II

		Before Instillation	One-half hour after Instillation	One hour after Instillation	Two hours after Instillation	Four hours after Instillation	Eight hours after Instillation	Eighteen hours after Instillation
H.R.								
Near	R.....	J1.....	J0.....	J0.....	J0.....	J0.....	J7.....	J1.....
	L.....	J1.....	J0.....	J0.....	J0.....	J0.....	J7.....	J1.....
Accommo-	R.....	10D.....	0.....	0.....	0.....	0.....	0.....	6.5D.....
dation	L.....	12D.....	0.....	0.....	0.....	0.....	0.....	9.5D.....
Pupil Size		3mm.....	7mm.....	6mm.....	6mm.....	7mm.....	7mm.....	5mm.....
L.E.								
Near	R.....	J3.....	J0.....	J0.....	J0.....	J0.....	J0.....	J6.....
	L.....	J2.....	J0.....	J0.....	J0.....	J0.....	J0.....	J2.....
Accommo-	R.....	5.5D.....	0.....	0.....	0.....	0.....	0.....	2.75D.....
dation	L.....	6.5D.....	0.....	0.....	0.....	0.....	0.....	3.75D.....
Pupil Size		5mm.....	7mm.....	7mm.....	7mm.....	7mm.....	7mm.....	6mm.....
E.B.								
Near	R.....	J2.....	J0.....	J0.....	J0.....	J0.....	J0.....	J2.....
	L.....	J2.....	J0.....	J0.....	J0.....	J0.....	J0.....	J2.....
Accommo-	R.....	6.5D.....	0.....	0.....	0.....	0.....	0.....	4.5D.....
dation	L.....	6.5D.....	0.....	0.....	0.....	0.....	0.....	4.5D.....
Pupil Size		7mm.....	7mm.....	7mm.....	7mm.....	8mm.....	7mm.....	7mm.....
G.H.								
Near	R.....	J2.....	J1.....	J7.....	J7.....	J7.....	J3.....	J2.....
	L.....	J2.....	J1.....	J7.....	J7.....	J7.....	J4.....	J2.....
Accommo-	R.....	6.5D.....	0.....	0.....	0.....	0.....	0.....	6D.....
dation	L.....	6.5D.....	0.....	0.....	0.....	0.....	0.....	5.5D.....
Pupil Size		4mm.....	7mm.....	6mm.....	6mm.....	7mm.....	7mm.....	7mm.....
M.H.								
Near	R.....	J1.....	J0.....	J0.....	J0.....	J7.....	J2.....	J4.....
	L.....	J1.....	J0.....	J0.....	J0.....	J0.....	J7.....	J4.....
Accommo-	R.....	9.5D.....	0.....	0.....	0.....	0.....	0.....	9D.....
dation	L.....	8D.....	0.....	0.....	0.....	0.....	0.....	7D.....
Pupil Size		6mm.....	7mm.....	7mm.....	7mm.....	7mm.....	7mm.....	7mm.....
B.B.								
Near	R.....	J1.....	J0.....	J0.....	J0.....	J0.....	J3.....	J1.....
	L.....	J1.....	J0.....	J0.....	J0.....	J0.....	J7.....	J1.....
Accommo-	R.....	7D.....	0.....	0.....	0.....	0.....	0.....	6.5D.....
dation	L.....	7D.....	0.....	0.....	0.....	0.....	0.....	7D.....
Pupil Size		4mm.....	6mm.....	7mm.....	7mm.....	6mm.....	7mm.....	5mm.....

Table III gives the data on twelve patients in the sixteen to thirty-one year age range who received benzedrine sulfate solution one-fourth of one per cent, freshly prepared) in conjunction with homatropine. Data in this table pertains to accommodation only and no pupillary measurements were taken. In this group two drops of benzedrine sulfate solution one-fourth of one per cent were instilled in each conjunctival sac and followed in three minutes by two drops of homatropine solution.

Table IV gives the effect on pupillary size and accommodation of the benzedrine sulfate—homatropine combination in twelve patients between sixteen and thirty-one years of age. Freshly prepared benzedrine sulfate solution was used in the first eight cases in this table; the benzedrine sulfate solution used in the last four cases was ten days old.

Table V gives the findings in three patients from thirty-three to thirty-five years of age following the plan already outlined. The third patient (H. M.) has a degenerative retinitis in the left eye which accounts for the results recorded for that eye.

Table VI is a summary of preceding tables.

TABLE III

		Before Instillation	One-half hour after Instillation	One hour after Instillation	Two hours after Instillation	Four hours after Instillation	Eight hours after Instillation	Eighteen hours after Instillation.
J.R.								
Near	R.....	J2.....	J7.....	J0.....	J0.....	J0.....	J1.....	J1.....
	L.....	J2.....	J7.....	J0.....	J0.....	J7.....	J1.....	J1.....
Accommo-	R.....	6D.....	0.....	0.....	0.....	0.....	7.5D.....	7.5D.....
dation	L.....	5D.....	0.....	0.....	0.....	0.....	7.5D.....	7.5D.....
J.G.								
Near	R.....	J1.....	J3.....	J0.....	J0.....	J7.....	J1.....	J1.....
	L.....	J1.....	J2.....	J0.....	J0.....	J5.....	J1.....	J1.....
Accommo-	R.....	11D.....	0.....	0.....	0.....	0.....	6D.....	10D.....
dation	L.....	9.5D.....	0.....	0.....	0.....	0.....	7D.....	8D.....
H.R.								
Near	R.....	J1.....	J1.....	J7.....	J0.....	J7.....	J1.....	J1.....
	L.....	J1.....	J2.....	J7.....	J0.....	J7.....	J1.....	J1.....
Accommo-	R.....	12D.....	11D.....	0.....	0.....	0.....	8.5D.....	10D.....
dation	L.....	14D.....	10D.....	0.....	0.....	0.....	11D.....	13D.....
E.B.								
Near	R.....	J1.....	J6.....	J0.....	J0.....	J0.....	J2.....	J2.....
	L.....	J1.....	J5.....	J0.....	J0.....	J0.....	J2.....	J1.....
Accommo-	R.....	7.5D.....	0.....	0.....	0.....	0.....	2.5D.....	4.75D.....
dation	L.....	7.5D.....	0.....	0.....	0.....	0.....	2.5D.....	6.25D.....
L.E.								
Near	R.....	J5.....	J0.....	J0.....	J0.....	J0.....	J7.....	J2.....
	L.....	J2.....	J7.....	J0.....	J0.....	J7.....	J6.....	J1.....
Accommo-	R.....	8D.....	0.....	0.....	0.....	0.....	0.....	6.5D.....
dation	L.....	8.25D.....	0.....	0.....	0.....	0.....	0.....	6.25D.....
B.B.								
Near	R.....	J1.....	J7.....	J0.....	J0.....	J0.....	J1.....	J1.....
	L.....	J1.....	J0.....	J0.....	J0.....	J0.....	J1.....	J1.....
Accommo-	R.....	9D.....	0.....	0.....	0.....	0.....	7.4D.....	5.25D.....
dation	L.....	7.25D.....	0.....	0.....	0.....	0.....	6.25D.....	4.75D.....
G.T.								
Near	R.....	J1.....	J5.....	J0.....	J0.....	J7.....	J1.....	J1.....
	L.....	J1.....	J2.....	J2.....	J7.....	J3.....	J1.....	J1.....
Accommo-	R.....	7D.....	0.....	0.....	0.....	0.....	7.5D.....	6.5D.....
dation	L.....	7.25D.....	4D.....	3.75D.....	0.....	0.....	6.75D.....	8D.....
F.B.								
Near	R.....	J1.....	J2.....	J6.....	J6.....	J2.....	J1.....	J1.....
	L.....	J3.....	J0.....	J0.....	J0.....	J0.....	J3.....	J2.....
Accommo-	R.....	8D.....	0.....	0.....	0.....	0.....	6.75D.....	6.75D.....
dation	L.....	7D.....	0.....	0.....	0.....	0.....	0.....	4.25D.....
G.H.								
Near	R.....	J2.....	J7.....	J7.....	J0.....	J6.....	J2.....	J2.....
	L.....	J2.....	J7.....	J0.....	J0.....	J6.....	J2.....	J2.....
Accommo-	R.....	6D.....	0.....	0.....	0.....	0.....	5.25D.....	5.75D.....
dation	L.....	6.5D.....	4D.....	0.....	0.....	0.....	0.....	5.75D.....
G.S.								
Near	R.....	J1.....	J7.....	J0.....	J0.....	J0.....	J1.....	J1.....
	L.....	J1.....	J7.....	J0.....	J0.....	J0.....	J2.....	J1.....
Accommo-	R.....	8.5D.....	0.....	0.....	0.....	0.....	2.75D.....	8D.....
dation	L.....	9.75D.....	0.....	0.....	0.....	0.....	2.75D.....	9D.....
M.H.								
Near	R.....	J1.....	J7.....	J0.....	J0.....	J7.....	J1.....	J1.....
	L.....	J1.....	J7.....	J0.....	J0.....	J0.....	J2.....	J1.....
Accommo-	R.....	10D.....	0.....	0.....	0.....	0.....	7.5D.....	9D.....
dation	L.....	10D.....	0.....	0.....	0.....	0.....	6.25D.....	9D.....
W.W.								
Near	R.....	J1.....	J1.....	J3.....	J6.....	J3.....	J1.....	J1.....
	L.....	J1.....	J1.....	J4.....	J6.....	J3.....	J2.....	J1.....
Accommo-	R.....	10D.....	3.75D.....	0.....	0.....	0.....	2.35D.....	9D.....
dation	L.....	13D.....	4.25D.....	0.....	0.....	0.....	2.35D.....	11D.....

## COMMENTS

In everyone of the thirty-nine patients receiving cycloplegic drops in the eyes there occurred some change in accommodation. Tables I and II offer an opportunity for comparing the effects of benzedrine-homatropine in combination with homatropine alone. We note one failure to obtain com-

TABLE IV

	Before Instillation	One-half hour after Instillation	One hour after Instillation	Two hours after Instillation	Four hours after Instillation	Eight hours after Instillation	Eighteen hours after Instillation.
<b>W.C.</b>							
Near R.....	J1	J0	J0	J0	J0	J0	J2
L.....	J1	J0	J0	J0	J0	J6	J2
Accommo- R.....	7D	0	0	0	0	0	6D
dation L.....	8D	0	0	0	0	0	7D
Pupil Size .....	2mm	8mm	8mm	8mm	8mm	8mm	4mm
<b>L.K.</b>							
Near R.....	J1	J2	J4	J7	J7	J1	J1
L.....	J1	J2	J7	J7	J7	J2	J1
Accommo- R.....	7.5D	0	0	0	0	0	7D
dation L.....	7.5D	0	0	0	0	0	7D
Pupil Size .....	2mm	8mm	9mm	9mm	9mm	8mm	4mm
<b>W.C.</b>							
Near R.....	J2	J0	J0	J0	J7	J2	J2
L.....	J3	J0	J0	J0	J7	J2	J2
Accommo- R.....	6.5D	0	0	0	0	0	6D
dation L.....	6.5D	0	0	0	0	0	5D
Pupil Size .....	2mm	8mm	8mm	8mm	7mm	7mm	3mm
<b>L.R.</b>							
Near R.....	J1	J7	J0	J0	J0	J2	J1
L.....	J1	J6	J0	J0	J4	J1	J1
Accommo- R.....	12D	0	0	0	0	0	10D
dation L.....	12D	0	0	0	0	0	11D
Pupil Size .....	5mm	7mm	8mm	8mm	7mm	6mm	5mm
<b>V.W.</b>							
Near R.....	J1	J0	J0	J0	J0	J1	J1
L.....	J1	J7	J0	J0	J0	J1	J1
Accommo- R.....	9.5D	0	0	0	0	0	7D
dation L.....	9D	0	0	0	0	0	7.5D
Pupil Size .....	3mm	7mm	8mm	8mm	8mm	7mm	4mm
<b>W.W.</b>							
Near R.....	J1	J0	J0	J0	J7	J1	J1
L.....	J1	J0	J0	J0	J7	J1	J1
Accommo- R.....	6D	0	0	0	0	0	6D
dation L.....	6.5D	0	0	0	0	0	5D
Pupil Size .....	4mm	8mm	8mm	8mm	8mm	8mm	4mm
<b>C.H.</b>							
Near R.....	J1	J4	J7	J0	J3	J1	J1
L.....	J1	J6	J7	J0	J7	J1	J1
Accommo- R.....	9D	0	0	0	0	7.5D	8.5D
dation L.....	9.5D	0	0	0	0	8.5D	9D
Pupil Size .....	3mm	8mm	8mm	8mm	8mm	8mm	3mm
<b>C.J.</b>							
Near R.....	J1	J7	J0	J0	J7	J1	J1
L.....	J1	J0	J0	J0	J7	J1	J1
Accommo- R.....	12D	0	0	0	0	7.5D	11D
dation L.....	13D	0	0	0	0	8D	10D
Pupil Size .....	4mm	8mm	7mm	8mm	8mm	7mm	4mm
<b>C.C.</b>							
Near R.....	J1	J1	J1	J2	J2	J1	J1
L.....	J1	J1	J2	J2	J2	J1	J1
Accommo- R.....	9D	4.5D	3.5D	2.37D	2.5D	4D	9D
dation L.....	11D	4.5D	3.5D	2.5D	2D	4D	10D
Pupil Size .....	3mm	7mm	8mm	8mm	8mm	8mm	8mm
<b>L.C.</b>							
Near R.....	J1	J2	J2	J4	J4	J2	J1
L.....	J1	J2	J6	J7	J6	J1	J1
Accommo- R.....	10D	0	0	0	0	0	9D
dation L.....	9.5D	0	0	0	0	0	8D
Pupil Size .....	3mm	8mm	8mm	9mm	7mm	7mm	4mm
<b>C.S.</b>							
Near R.....	J1	J0	J0	J0	J0	J1	J1
L.....	J1	J0	J0	J0	J0	J2	J1
Accommo- R.....	7D	0	0	0	0	0	7D
dation L.....	6.5D	0	0	0	0	0	6D
Pupil Size .....	4mm	9mm	9mm	9mm	8mm	8mm	4mm
<b>A.H.</b>							
Near R.....	J1	J7	J7	J7	J7	J3	J1
L.....	J1	J7	J7	J7	J7	J2	J1
Accommo- R.....	7D	0	0	0	0	0	6D
dation L.....	7.5D	0	0	0	0	0	7D
Pupil Size .....	3mm	8mm	8mm	8mm	7mm	7mm	4mm

plete cycloplegia in each group. The "homatropine only" group shows a more rapid onset and longer duration of cycloplegia with consequent delay in return of accommodation. In Table II, two patients show beginning return of accommodation at the end of four hours in contrast with four in Table I. The entire benzedrine-homatropine group showed a complete or nearly complete return of accommodation at the end of eight hours but none of the "homatropine only" group showed this at the end of eight hours and only four of the six showed it at the end of eighteen hours. In the benzedrine-homatropine group there occurred a definitely greater dilation of the pupil than in the "homatropine only" group.

Tables III and IV show a beginning return of accommodation in sixteen of twenty-four patients at the end of four hours and twenty-two of the

TABLE V

	Before Instillation	One-half hour after Instillation	One hour after Instillation	Two hours after Instillation	Four hours after Instillation	Eight hours after Instillation	Eighteen hours after Instillation
<b>M.G.</b>							
Near R.....	J1	J7	J7	J7	J7	J7	J2
L.....	J1	J7	J7	J7	J7	J7	J2
Accommo- R.....	9D	0	0	0	0	0	5D
dation L.....	9D	0	0	0	0	0	6D
Pupil Size .....	3mm	8mm	8mm	8mm	8mm	8mm	3mm
<b>G.W.</b>							
Near R.....	J1	J0	J0	J0	J0	J0	J2
L.....	J1	J0	J0	J0	J0	J7	J2
Accommo- R.....	5.5D	0	0	0	0	0	5D
dation L.....	6D	0	0	0	0	0	6D
Pupil Size .....	3mm	9mm	9mm	9mm	8mm	8mm	4mm
<b>*H.M.</b>							
Near R.....	J1	J0	J0	J0	J0	J2	J1
L.....	J0	J0	J0	J0	J0	J0	J0
Accommo- R.....	4.5D	0	0	0	0	0	3.5D
dation L.....	0	0	0	0	0	0	0
Pupil Size .....	4mm						

twenty-four showed a complete or nearly complete return of accommodation at the end of eight hours.

In the three older patients appearing in Table V there is apparent a marked delay in the return of accommodation.

This study is incomplete at the present time and we do not wish to draw final conclusions. Certain possibilities which are suggested by the study to date are as follows:

1. Benzedrine-sulfate solution followed by homatropine gives complete cycloplegia in a high percentage of patients in the age group studied.

2. With this solution, maximum cycloplegia probably occurs at the end of two hours with satisfactory cycloplegia being present for an hour or longer.



3. Following benzedrine homatropine cycloplegia there is an appreciable return of accommodation in about two-thirds of the patients at the end of four hours and a complete or almost complete return of accommodation at the end of eight hours in a high

TABLE VI

Table No.....	I.....	II.....	III.....	IV.....	V.....
Total Number of Patients in Group.....	6.....	6.....	12.....	12.....	3.....
Number of Patients showing complete Cycloplegia during test period.....	5.....	5.....	9.....	8.....	2.....
Number of Patients showing complete Cycloplegia at end of half hour.....	1.....	5.....	0.....	4.....	2.....
Number of Patients showing complete Cycloplegia at end of one hour.....	5.....	5.....	7.....	7.....	2.....
Number of Patients showing complete Cycloplegia at end of two hours.....	5.....	5.....	9.....	8.....	2.....
Number of Patients showing complete Cycloplegia at end of four hours.....	3.....	5.....	3.....	3.....	2.....
Number of Patients showing only partial Cycloplegia at the most.....	1.....	1.....	3.....	4.....	1.....
Number of Patients showing no change in accommodation.....	0.....	0.....	0.....	0.....	0.....
Number of Patients showing a beginning return of accommodation at the end of two hours.....	0.....	0.....	0.....	0.....	0.....
Number of Patients showing a beginning return of accommodation at the end of four hours.....	4.....	2.....	10.....	6.....	0.....
Number of Patients showing complete or nearly complete (a) return of accommodation at the end of eight hours.....	6.....	0.....	11.....	11.....	0.....
Number of Patients showing complete return of accommodation at the end of eighteen hours.....	6.....	4.....	12.....	12.....	3.....
(a) "Nearly complete" means here the ability to read J3 or better.					

Table II deals with patients receiving Homatropine only; all the others received the combination Benzedrine<sup>2</sup>-Homatropine.

percentage of cases (ninety-three per cent in this series).

4. Benzedrine-homatropine in combination give greater dilation of the pupil than homatropine alone, a fact worth considering when choosing a drug to use preliminary to fundus studies.

1. Dr. S. Judd Beach of Portland, Maine, recently read a paper before the Academy of Ophthalmology and Otolaryngology reporting results with a solution of benzedrine sulfate used in conjunction with homatropine for producing cycloplegia.

## MALIGNANT HYPERTENSION

Maurice Snyder, M.D.

Salina, Kansas

In recent years, more and more recognition has been given to a rather unusual and rapidly fatal form of hypertension, termed "malignant hypertension".

The syndrome of malignant hypertension as described by Keith and his associates,<sup>1</sup> is characterized by severe arterial hypertension, neuroretinitis, a progressive course, and a uniformly poor prognosis. The condition may represent the final stage of a primary or essential hypertension, but fre-

quently appears to be of the malignant type from the onset.

A number of different terms have been used to describe this syndrome. Among those most commonly used are: Malignant Nephrosclerosis (Fahr),<sup>2</sup> Malignant Phase of Essential Hypertension (Fishberg),<sup>3</sup> Malignant Hypertension (Volhard and Fahr, Keith and others).<sup>4,2,5</sup> Since fatal termination in this disease takes place through failure of one or more organs, and not necessarily due to renal failure, the latter term would appear to be better suited for describing this syndrome.

The condition, not unlike essential hypertension of the benign type, is frequently discovered during routine examination, but more often is characterized by a symptomatology of weakness, lack of endurance, loss of weight and rapid physical and mental degradation, which very soon causes the patient to seek medical aid.

Differentiation between typical cases of benign and malignant hypertension is comparatively simple in most cases, and is based primarily on the appearance of the retina on ophthalmoscopic examination. In the benign form, sclerosis of the retinal arteries of variable degree is observed with few other abnormal changes. The malignant type on the other hand, presents varying degrees of neuroretinal edema, retinal sclerosis, endarteritis, exudates and hemorrhages. Frequently the edema of the optic disc and surrounding retina is out of proportion to the other retinal changes such as hemorrhagic areas, cotton wool exudates and arteriosclerosis.

In benign hypertension, the elevated blood pressure seems to be dependent on a functional vasoconstriction affecting chiefly the arterioles, which eventually leads to arteriosclerotic changes in these vessels, but only after the hypertension has been one of long standing. Many of these patients live quite comfortably to moderately old age with cardiac, cerebral and renal functions remaining adequate.

In malignant hypertension, the picture is entirely different. The blood pressure is usually extremely high and remains sustained despite all forms of therapy. The course of the disease is rapidly fatal, death usually occurring from congestive heart failure, cerebral hemorrhage, uremia, bronchial pneumonia or a combination of these causes within two years after the diagnosis is made.

There is a group of cases which cannot be classified as either benign or malignant, even after the most detailed clinical and laboratory studies. Ophthalmoscopic examination reveals more extensive changes in the form of exudates and hemorrhages than are found in patients with benign hy-



pertension and yet because of the absence of papilledema, the condition cannot be classed as malignant hypertension. These cases are, therefore, classified as the intermediate or pre-malignant group with a poor prognosis.

Although the malignant and intermediate forms of essential hypertension may develop upon hypertension of the benign type, the majority of cases of benign hypertension which terminate fatally do so without progressing into the malignant stage. Since we have, by and large, very little to offer except prognosis to patients with essential hypertension, the recognition of the three types of hypertension is obviously of extreme importance.

The following report concerns a comparative study of forty-eight cases of benign, intermediate and malignant hypertension, started five years ago at the Cleveland Clinic. The data is compiled chiefly from cases seen and followed at this institution and is presented in tabular form, using the foregoing as criteria in the classification of the three types of hypertension.

### ANALYSIS OF DATA

#### MALIGNANT HYPERTENSION

The patients with malignant hypertension were between the ages of twenty-six and sixty-six years. The average blood pressure was 225 systolic and

130 diastolic. The duration of the hypertension in cases in which it could be estimated, averaged about four years. Neuroretinal edema was present in all but one patient, in whom there was an extensive bilateral vitreous hemorrhage obscuring the discs. Retinal exudates and hemorrhages were noted in fourteen of the sixteen patients.

Sclerosis of the retinal arteries was invariably present and usually of moderate to advanced grade. Approximately fifty per cent of the patients exhibited a moderate to advanced degree of arteriosclerosis of the radial and brachial arteries. The blood count and percentage of hemoglobin for the group was within normal limits. Values for blood urea and creatinine were only slightly above normal in the majority of cases.

The Urea Clearance kidney function test showed a definite decrease in function, but in only two cases was the kidney function below the critical level. These values were checked with the phenol-sulphonaphthalein kidney test, but the former gave more information as to the degree of impaired function, since the phenolsulphonaphthalein test varied little until critical levels of function were reached.

Analyses of urine were done on twelve-hour dry specimens, and showed a tendency toward specific gravity readings below 1.020, varying degrees of

TABLE I

#### OBSERVATIONS ON PATIENTS WITH MALIGNANT HYPERTENSION

No.	Age Years	Sex	Blood Pressure		Duration of Hyper- tension Years	Peripheral Arterio- sclerosis Grade	Fundus*		Erythro- cytes Millions	Hemo- globin %	Urea mg% %	Urine			
			Systolic Mm.Hg.	Diastolic Mm.Hg.			Retinitis	Sclerosis				Specific gravity	Albumin	Casts	Urea clearance Percent
1.	45	F	280	110	5+	III	Mod.	Adv.	6.2	97	45	1022	trace	++	35
2.	52	M	210	140	4	IV	Adv.	Adv.	4.4	84	111	1014	++	++	16
3.	34	M	205	130	3—	I	Mod. Adv.	Adv.	4.4	84	39	1013	trace	+	89
4.	66	M	200	110	Unknown	II+	Slight	Adv.	5.0	91	36	1020	trace	+	87
5.	51	M	280	110	4	II+	Slight	Mod. Adv.	5.1	91	40	1025	trace	++	57
6.	48	M	300	165	Unknown	II+	Adv.	Adv.	4.3	71	66	1018	+++	0	48
7.	55	F	190	120	Unknown	I	Adv.	Mod.	4.1	75	36	1010	trace	0	64
8.	44	F	250	170	1½+	II	†	†	4.0	70	45	1018	++	++	19
9.	40	F	220	160	3—	I+	Adv.	Mod. Adv.	4.8	74	27	1013	trace	0	49
10.	54	F	190	110	Unknown	I	Slight	Mod.	5.3	91	36	1020	0	0	128
11.	47	F	216	128	5+	I+	Adv.	Mod.	4.4	78	36	.....	trace	0	50
12.	43	F	260	150	8	III	Mod.	Mod.	4.2	85	....	1013	0	0	53
13.	49	M	180	96	5	I	Mod.	Mod.	4.6	85	45	1012	0	0	61
14.	32	F	214	124	5+	I+	Slight	Mod.	4.9	79	36	1018	trace	+	55
15.	27	F	240	140	3	I	Adv.	Adv.	4.2	71	30	1019	trace	0	55
16.	26	F	170	110	4	I	Slight	Slight	4.6	78	39	1024	0	0	49
Avg.	45		225	130					4.7	82	44				55

\* Neuroretinal edema present in all cases.

† Extensive bilateral vitreous hemorrhage.

TABLE II

OBSERVATIONS ON PATIENTS WITH ESSENTIAL HYPERTENSION OF INTERMEDIATE GRADE

No.	Age	Sex	Blood Pressure Systolic      Diastolic	Duration of Hyper- tension Years	Peripheral Arterio- sclerosis Grade	Retinitis	Fundus Sclerosis	Erythro- cytes Millions	Blood Hemo- globin %	Urea mgs%	Specific gravity	Urine Albumin	Casts	Urea clearance Percent
	Years		Mm.Hg.   Mm.Hg.											
1.	55	F	230    120	3	I+	Slight	Mod. Adv.	5.0	91	42	1009	0	0	40
2.	34	M	150    106	1½	II	Slight	Mod. Adv.	5.1	91	39	1015	0	0	96
3.	53	F	220    112	Unknown	II+	Slight	Adv.	4.6	91	45	1019	trace	0	50
4.	53	F	210    120	18	I	Slight	Mod.	4.5	84	33	1008	trace	0	25
5.	59	F	220    110	5	I	Mod. Adv.	Mod. Adv.	4.4	84	30	1020	trace	0	72
6.	62	M	204    114	3+	III+	Slight	Adv.	4.6	97	45	1023	trace	0	74
7.	58	M	200    120	Unknown	II	Mod. Adv.*	Mod. Adv.	4.9	81	45	1025	trace	+	54
8.	46	F	180    98	1+	I	Slight*	Adv.	4.6	81	54	1012	trace	0	46
9.	61	M	256    160	10+	III+	Slight*	Adv.	4.0	74	75	1020	+	+	30
10.	50	M	264    150	10+	II+	Mod.*	Mod. Adv.	6.1	97	27	1020	trace	+	64
11.	54	F	180    108	10	II	Adv.	Adv.	4.7	78	39	1026	trace	0	64
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avg.	53		210    120					4.8	86	43				56

\* Including haziness of the optic disks.

albuminuria and casts. Blood cholesterol determinations were made in eight cases and were found to range from normal to slightly elevated values. The basal metabolic rate was elevated in this group and in the other two groups of hypertension studied.

In three cases lumbar puncture was performed, and in each instance spinal fluid pressures were increased, ranging between 250 to 350 millimeters of water. Serum albumin and serum globulin determinations were done in four cases, all of which were normal except one in which low values were found and the patient in this case was edematous. Small adenomas of the thyroid gland were found in six cases.

The studies of Keith and his associates at the Mayo Clinic established the gravity of the prognosis in patients with essential hypertension of the malignant type, and this fact is well borne out in this series of cases in which a follow-up study revealed no patient in the malignant group alive at the end of a three-year period. A summary of the observations is presented in Table I.

HYPERTENSION OF INTERMEDIATE GRADE

The patients with essential hypertension of the intermediate or pre-malignant grade were between the ages of thirty-four and sixty-two years. The average blood pressure was 210 systolic and 120 diastolic. In no way did this group vary from the benign and malignant group, except in the ophthalmoscopic findings. These revealed moderate to advanced sclerosis of the retinal vessels and from a slight to an advanced degree of retinitis. In four pati-

ents, the outline of the optic discs were hazy, but actual neuroretinal edema was not present. Many of these patients were still alive at the end of the three-year period. A summary of the observations is presented in Table II.

BENIGN HYPERTENSION

The patients with essential hypertension of the benign type were between the ages of twenty-nine and sixty-seven years. The average blood pressure was 196 systolic, and 100 diastolic. The duration of the hypertension in the patients in whom it could be estimated ranged from three to more than twelve years. Slight to moderate thickening of the peripheral vessels was usually present.

Ophthalmoscopic examination showed slight to moderate retinal sclerosis, frequent arteriovenous nicking, but in no instance was there retinitis or papilledema. In nearly every instance, the values for blood chemistry were normal and the kidney function tests, for the most part, ranged from normal to only slightly diminished function. Adenomas of the thyroid were found in five of the twenty-six cases in this group. The majority of the patients in this group were alive at the end of the three-year follow-up period. A summary of the observations is presented in Table III.

COMMENT

The results of this investigation demonstrate that patients with the intermediate and malignant type of essential hypertension differ from those with benign hypertension only in degree of severity. Ap-



parently, examination by careful inspection will reveal more in these cases from the differential diagnostic stand-point, than blood chemistry and other laboratory findings; yet a certain amount of laboratory investigation is indicated in order to aid one later in the proper management of the case. The malignant type affects individuals chiefly below the age of fifty, whereas the benign type affects those in the later brackets of life, the majority of which are over fifty years of age. No factors could be determined from the present analysis of cases to account for its tendency to appear in the younger age groups, nor for the rapidity of the progress of this disease over other forms of hypertension.

Although the eyegrounds, because of their lack of perivascular supportive tissue, are the first to show the effects of the hypertension on the arteries and arterioles of the vascular tree, investigators have demonstrated quite conclusively that the damage to the blood vessels in malignant hypertension is more severe and widespread, affecting arterioles, capillaries and precapillary vessels in all organs of the body, including the skin. Kernohan, Anderson and Keith,<sup>6</sup> report striking hypertrophy of the media and proliferation of the intima of arterioles, in both benign and malignant hypertension, but find that the changes are more marked and widespread in malignant hypertension.

Ernstene and Snyder,<sup>7</sup> in 1934 demonstrated that the pathologic process in malignant hypertension extends to the vessels of the skin, as they were able to demonstrate a marked reduction in the size of the histamine flare in response to the intradermal injection of histamine dihydrochloride, yet found normal-sized flares in cases of benign hypertension and hypertension due to decrescent arteriosclerosis. This work has recently been confirmed by Dicker (Bruxelles),<sup>8</sup> who found reduced flares in patients with malignant hypertension, after the intracutaneous injection of either histamine or acetylcholine.

The work done on the reaction of the cutaneous vessels to chemical vasodilators would seem to indicate that the state of vasoconstriction present in essential hypertension of the malignant type is generalized and of such severity and permanency that a powerful stimulus, such as histamine or acetylcholine, could no longer cause normal vasodilatation. The author has observed this extreme state of vasoconstriction of the capillary vessels in cases of malignant hypertension and using a capillary microscope and tonometer, found an actual increase in the capillary blood pressure in these cases; yet finding normal capillary dynamics in cases of benign hypertension.<sup>9</sup>

As to what produces this severe and prolonged state of peripheral vascular hypertonus is not known.

TABLE III  
OBSERVATION ON PATIENTS WITH BENIGN HYPERTENSION

No.	Age Years	Sex	Blood Pressure		Duration of Hyper- tension Years	Peripheral Arterio- sclerosis Grade	Fundus		Blood		Urea mgs %	Specific gravity	Urine Albumin	Casts	Urea clearance Percent
			Systolic Mm.Hg.	Diastolic Mm.Hg.			Retinitis	Sclerosis	Erythro- cytes Millions	Hemo- globin %					
1.	50	F	174	104	4+	0	0	Slight	5.6	84	24	1022	0	0	145
2.	54	M	170	106	Unknown	II	0	Slight	4.8	88	30	1020	trace	0	41
3.	61	F	182	100	10+	II		Advanced	4.7	84	42	1017	trace	0	40
4.	59	M	180	104	3	I	0	Moderate	5.0	104	30	1020	0	0	41
5.	29	F	170	110	4	0	0	Slight	4.8	87	30	1020	trace	0	81
6.	63	M	230	124	5+	II	0	Slight	4.2	65	33	1017	0	+	....
7.	49	F	210	110	12+	I	0	Slight	4.5	60	27	1026	trace	0	72
8.	38	F	196	126	12+	0	0	Slight	4.4	85	24	1022	0	0	66
9.	49	F	210	118	4—	I	†	Slight	4.6	80	30	1020	trace	+	76
10.	55	F	184	94	Unknown	I	0	Slight	4.2	71	36	1027	trace	0	65
11.	55	M	200	106	Unknown	I	0	Slight	5.1	97	....	1024	0	0	....
12.	58	M	160	96	7+	III	0	Slight	5.1	91	45	1023	trace	+	78
13.	49	F	210	110	6+	II	0	Moderate	4.8	84	33	1021	0	0	45
14.	42	M	206	106	Unknown	II	0	Slight	4.0	61	42	1030	0	0	69
15.	58	M	196	112	Unknown	II	†	Moderately Advanced	4.9	84	24	1022	trace	0	141
16.	45	F	196	116	4+	II	0	Slight	4.8	90	39	1018	0	0	59
17.	52	F	230	110	8+	I	0	Moderate	5.0	85	36	1026	trace	0	85
18.	40	F	220	110	Unknown	I	0	Moderate	4.1	84	42	1012	0	0	43
19.	67	F	190	100	6—	I	0	Moderate	4.6	78	24	1030	0	0	65
20.	56	M	180	116	Unknown	II	0	Moderate	5.1	91	....	1021	0	0	72
21.	42	F	230	126	Unknown	I	0	Advanced	4.8	91	30	1020	0	0	100
Avg.	51		196	110		I+									73

† Few small hemorrhages.



TABLE IV

TABLE OF AVERAGE VALUES

Condition	Number of Cases	Age Years Blood	Systolic Mm. Hg.	Pressure Diastolic Mm. Hg.	Duration Years	Urea mg.	Urea Clearance Per cent
Malignant Hypertension	16	45	225	130	4	44	55
Hypertension of Intermediate grade	11	53	210	120	6	43	56
Benign Hypertension	21	51	196	110	7	32	73

There are some who feel that the marked vasoconstriction present in this disease is due to permanent and excessive stimuli produced from the sympathetic nervous system. Others ascribe the vasoconstriction as due to circulating metabolites, endocrines, diet, et cetera. Much work must be done before this question can be decided.

In view of the facts to date it would appear more likely that a state of pathologic physiology exists in the arterial tree itself in essential hypertension. Since in malignant hypertension the abnormal process involves not only arterioles, but presumably the capillaries at large, this more extensive involvement could account for the severity of this form of hypertension over that of the benign type in which it has been established that the resistance in the vascular circuit in the latter condition lies proximal to the arterial limb of the capillary blood vessels (Ellis and Weiss).<sup>10</sup>

Recently, in a number of places, surgical operations on the sympathetic nervous system have been devised to alter the sympathetic nervous system influence on the tone of the peripheral vessels. In a number of instances this procedure controlled the symptoms and reduced the arterial pressure in patients with essential hypertension. Whereas it may prove of some value in certain cases of benign hypertension, certainly an approach of this kind in the malignant type would seem very futile. On the other hand, early surgical intervention in the severe benign or early malignant types may prove effective in producing an arrest in the progress of the disease and perhaps prevent the occurrence of the malignant phase, thereby prolonging life.

### SUMMARY

A comparative study of forty-eight cases of benign, intermediate and malignant hypertension is presented.

The following conclusions were reached:

1. Patients with the intermediate and malignant type of hypertension differ from those with benign hypertension only in degree of severity.

2. Differential diagnosis between benign and malignant hypertension depends primarily on the appearance of the retina on ophthalmoscopic examination.

3. That a state of pathologic physiology exists in the vessels of the arterial tree in essential hypertension, and this process in the malignant type is more severe, widespread and extended, to include the minute vessels of the capillary circulation.

4. A three-year follow-up study on cases in this series further establishes the gravity of the prognosis in patients with malignant hypertension.

### BIBLIOGRAPHY

1. Keith, N. M., Wagener, H. P., and Kernohan, J. W.: The Syndrome of Malignant Hypertension, *Archives of Internal Medicine* 41:141 February 1928.
2. Fahr, T.: *Über Nephrosklerose*, *Virchows Arch. f. path. Anat.* 226:119, 1919.
3. Fishberg, A. M.: *Hypertension and Nephritis*, Lea and Febiger, Philadelphia, 1934.
4. Volhard, F. und Fahr, T.: *Die Brightsche Nierenkrankheit*, *Klinik Pathologic und Atlas*, Berlin: Julian Springer, 1914.
5. Derow, H. A., and Altschule, M.D.: Malignant Hypertension, *New England Journal of Medicine*, 213:951, November 1935.
6. Kernohan, J. W., Anderson, E. W., and Keith, N. M.: The Arterioles in Cases of Hypertension, *Archives of Internal Medicine* 44:395 September 1929.
7. Ernstene, A. C. and Snyder, Maurice: Effect of Arteriosclerosis and Benign and Malignant Hypertension on the Area of Histamine Flares, *Archives of Internal Medicine* 53:865 (June), 1934.
8. Dicker, E.: Reactions locales des Capillaires à l'Histamine et à l'acetylcholine au cours des diverses Variétés d'Hypertension, *Presse Medicale*, Paris 44:1449 (September) 1936.
9. Snyder, Maurice: The Capillary Blood Pressure in Normal Subjects and in Patients with Arterial Hypertension, *Journal of The Kansas Medical Society* 35:425 (November) 1934.
10. Ellis, L. B., and Weiss, S.: Measurement of Capillary Pressure under Natural Conditions and after Arterial Dilatation, *Journal of Clinical Investigation* 8:47 (December) 1929.

## MODERN DRUG THERAPY\*

Robert M. Isenberger, M.D.\*\*

Kansas City, Kansas

The physician is concerned primarily with causes and effects and with the application of clinical and laboratory evidence to the solution of diagnostic and therapeutic problems. He is analytical in his approach to these problems. He uses the experimental method of tests and observation like that of the

\*Presented at the meeting of the Southeastern Kansas Medical Society, Coffeyville, September 15th, 1937.  
 \*\*Associate Professor of Pharmacology, University of Kansas, School of Medicine, Kansas City, Kansas.

scientist who postulates a truth and attempts to prove it, and, together with the trained laboratory scientist, is helping to substitute factual information for impressions and opinions. The result is that precision is now the rule in diagnosis and therapeutics is becoming increasingly exact. It is true, nevertheless, that the full therapeutic possibilities and limitations of numerous drugs and chemicals have not been established.

Resourceful chemists and enterprising manufacturers have made available a bewildering number of chemicals or drugs which at best are widely different, variable, and often complex in their known pharmacological actions. To add to the confusion and uncertainty many widely advertised drugs have been placed on the market before adequate pharmacological study has been completed. It is suggested, therefore, that drug therapy be guided by certain stabilizing principles:—

1. Periodic inventory of our views on common official drugs to ensure that they include a knowledge of pharmacological facts which might be overlooked.
2. Cultivation of the art of combining and associating well known official drugs to increase therapeutic efficiency.
3. Careful clinical trial of newly discovered drugs which have had proper preliminary pharmacological study, uninfluenced by commercialism and propaganda.
4. Avoid the extremes of gullibility and nihilism in therapeutics.

In the present day use of common drugs basic pharmacological facts should be reviewed and confirmed from time to time. Digitalis, epinephrine, strychnine, morphine and opium are examples which will be discussed briefly.

#### DIGITALIS

Full therapeutic effects of digitalis are sometimes accompanied by minor toxic actions; that is, the therapeutic actions of myocardial and vagus stimulation become excessive and merge into toxic actions, according to dosage and other determining conditions. Controllable absorption of a digitaloid drug is therefore imperative. In chronic heart disease, however, with venous stasis of high degree, oral administration of digitalis sometimes fails because of faulty absorption. In this event intravenous strophanthin may be indicated, but only in the smallest optimal doses and with the definite idea of slow recompensation under strict and continuous observation. The main hazard involved is sudden overdosage because of previous digitalization which is not recognized. It is also dangerous to inject calcium chloride intra-

venously when the heart has been subjected to the effects of digitalis. Irregularities, fibrillation and even cardiac arrest may occur. Two deaths have been reported recently.

#### EPINEPHRINE

Epinephrine is another common drug which requires careful analysis in its use. The main actions of this drug are vasoconstriction, cardiac stimulation, vagus stimulation and sympathetic stimulation. But this combination of effects may actually decrease rather than increase circulatory efficiency. Some state that more people have died from the effects of epinephrine than have been saved. How does this happen? There is a tendency to use the drug intravenously because of the local vasoconstriction which interferes with absorption. If an excessive dose is given, or if the ordinary dose is administered too rapidly and improperly diluted, there is extreme danger. In chronic cardiac insufficiency and in cardiac poisoning by chloroform, phenol etc., epinephrine intravenously in minute amounts may cause cardiac fibrillation, dilation and arrest from the excessive load of the resulting increase in blood pressure and abnormal cardiac irritability.

#### STRYCHNINE

A further illustration of the changing views in pharmacology is the new conception of the action of strychnine, which is now regarded as largely an indirect respiratory and circulatory stimulant. The supporting effect on respiration is probably the result of increased carbon dioxide and heat production caused by the marked improvement in muscle tone. The increased intra-muscular pressure also provides a better return of venous blood to the heart improving the cardiac output.

#### MORPHINE AND OPIUM

Finally we may call attention to the confusion which has existed regarding certain actions of morphine and opium. It is well to remember that there are two chemically distinct groups of alkaloids in opium. The phenanthrene group is represented by morphine and codeine; the isoquinoline group by papaverine and narcotine. Both groups have more or less narcotic and convulsant actions. The essential difference is that the phenanthrene group stimulates and the isoquinoline group depresses all smooth muscle. Morphine, for example, in small doses causes constipation because of direct spastic tonus of the entire gastrointestinal tract, especially of the sphincters; and also because of diminished attention to rectal sensation and the defecation reflex. Moreover, the asphyxia from toxic doses of morphine is in many instances the result of bronchial spasm as much



as depression of the respiratory center. Papaverine on the other hand, relaxes smooth muscle spasm.

### COMBINATION OF DRUGS

A thorough understanding of the actions of tried and accepted drugs naturally suggests the possibilities of various combinations. Generally speaking, undesirable actions can be minimized and desirable actions reinforced. Controllable therapeutic results otherwise impossible can be obtained. To this end we must write well balanced prescriptions which are correct in every detail, and more important than the number of ingredients contained is their fitness to the purposes intended. I have selected a few commonly used prescriptions to illustrate rational combination of drugs. As a vesical sedative, for example, tincture of belladonna, potassium acetate, sodium bromide, syrup of orange and water. For subacute and chronic joint pain, potassium iodide, sodium salicylate and compound syrup of sarsaparilla. For the relief of nausea, sodium bromide, sodium bicarbonate and effervescent sodium phosphate as an effervescent powder. In the case of severe pain, often as a substitute for morphine, extract of hyoscyamus, codeine sulphate, phenobarbital, acetophenetidin in capsules. It is evident from these combinations that drugs acting in the same functional direction but on different mechanisms can be expected to supplement and fortify each other to a degree beyond that of simple addition, and usually will allow or even require corresponding reduction of dosage.

### NEW DRUGS

We now come to the broad field of newer drugs within which certain findings appear to be conclusive and accepted, whereas other results merely indicate the directions in which current trends of medication are moving. Permanent values can be established only by careful trial in the great testing laboratory of medical practice over a period of years. A short summary of the more important recent contributions to drug therapy is given here, arranged according to the physiological systems.

#### 1. CIRCULATION

Johnson has reported favorable results in traumatic shock from the use of a new vasoconstrictor, neosynephrine, particularly as an adjunct and preliminary to the usual supportive measures.

#### 2. RESPIRATORY SYSTEM

You are reminded of the findings obtained by Diehl at the Students Health Service of the University of Minnesota on the treatment of colds. Codeine and papaverine induced a prompt decrease or complete disappearance of nasal discharge, congestion,

discomfort and incapacity, especially when taken at the onset of symptoms.

#### 3. NERVOUS SYSTEM

Lundy, Gwathmey and others describe advantages in certain patients of the use of preanesthetic narcosis by the action of barbiturates and to some extent tribromethanol. Psychic trauma is reduced and the inhalation anesthesia is easier, less unpleasant and more efficient. The allowance of oxygen is increased and there is a reduction in the amount of inhalation agent required. The patient is entitled to the benefit of relatively harmless drugs which will make the ordeal of surgery less terrifying.

Cyclopropane, introduced by Lucas and Henderson, occupies a high place in the field of gaseous anesthesia. It seems to be safe, controllable, non-irritating and non-toxic, permitting good oxygenation and satisfactory relaxation. In the first five year period of its use no complaint was made by fifty-four different surgeons. It is an extremely potent gas and should be given as cautiously as chloroform.

Benzedrine acts powerfully on the higher centers as a nervous system stimulant without much loss of effect on repeated administration. Orally, in doses of  $\frac{1}{25}$  to  $\frac{1}{3}$  of a grain, it lessens fatigue and produces exhilaration, loquacity, loss of appetite and insomnia, and is being used to some extent for its effects in chronic fatigue states and disorders of mood.

The morning "hangover" of alcoholism is said to be greatly benefited. Benzedrine also raises the blood pressure, relieves congestion of mucous membranes, and relaxes spasm of the gastrointestinal tract.

#### 4. GASTROINTESTINAL

Schloepfer has reported prostigmine to be a reliable agent for the early restoration of normal peristalsis following laparotomy, and gas pains are said to be greatly diminished if not completely avoided.

#### 5. GENITOURINARY

Helmholz, Lyon, Dunlop and others have concluded that mandelic acid is an efficient urinary antiseptic, and that this simple and practical treatment constitutes a really important therapeutic advance in chronic urinary infections.

Keith and Binger again call attention to the value of potassium nitrate as a diuretic. Comparatively large doses can be given by mouth without toxic effect, and they point out that there is no complicating factor of acidosis as is true with calcium chloride, ammonium chloride, and ammonium nitrate.

Davis, Adair and others emphasize the therapeutic possibilities of ergonovine, a pure crystalline

water soluble base isolated from crude ergot. Ergonovine is effective in small doses by oral administration. It promptly induces and maintains a high degree of uterine tone. There are no important side-actions and the toxicity is low.

#### 6. METABOLISM AND ENDOCRINE SYSTEM

Hagedorn, Richardson, Russell and others consider that by administering protamine zinc insulin, which is effective throughout a twenty-four hour period, one approaches the action of insulin in the normal individual.

#### 7. LOCAL MEDICATION

Freshly prepared tannic acid solution has long been used as an eschar-producing substance in the treatment of burns, but this is now being replaced by a solution of tannic acid five per cent and silver nitrate ten per cent. This preparation appears to change the lesion of a burned area into one comparable to a surgical wound, and is now considered to be superior to other methods of treatment.

#### 8. TOXICOLOGY

Chen, Rose, and Clowes find that the highest antidotal action against cyanide poisoning is exhibited by the intravenous injection of a combination of sodium nitrite and sodium thiosulphate. In favorable conditions in dogs this combination detoxifies twenty minimal lethal doses of sodium cyanide and is ten times as effective as methylene blue. Recovery has occurred when these two substances were given in the late stages of cyanide poisoning.

Kempf, McCallum and Zervas have established the use of barbiturates as highly effective antidotes in convulsive poisoning, especially that resulting from strychnine. It is very important that the barbiturate be injected slowly in carefully adjusted doses to avoid respiratory and circulatory collapse.

Promising results have been obtained by Tatum, Maloney, Marshall, and Koppányi in the use of picrotoxin against barbiturate poisoning. Excessive doses of picrotoxin, however, are apt to cause convulsions and even collapse without restoring consciousness in deep barbiturate narcosis. At the same time, sub-toxic doses improve the respiration and circulation and restore patients and experimental animals to a condition from which recovery may often be expected.

#### 9. SPECIFIC CHEMOTHERAPY

Sulfanilamide, which is para-amino-benzene-sulfonamide, is a remarkable new drug that is now the object of widespread pharmacotherapeutic research in the field of infection and resistance. It is probably the active fraction derived in the body from the more complex azo-benzene-sulfonamide introduced originally as Prontosil.

The therapeutic efficiency of any compound is measured best by determining the ratio of the maximum tolerated dose to the minimal curative dose, sometimes referred to as the chemotherapeutic index. In order to establish this ratio or index accurately for sulfanilamide by the study of animal infection and clinical observation, certain precautions recommended by Findlay should be observed:—

1. A sufficiently large number of cases should be investigated to ensure against errors of random sampling.

2. No other treatment should be given at the time of the special treatment.

3. Patients should remain on the treatment for a sufficient length of time to ensure the maximum therapeutic effects.

4. Patients should remain under observation sufficiently long to make certain that the infection has been entirely eradicated and is not temporarily in abeyance.

The closer the approximation to these and other necessary standard conditions the greater will be the statistical value of the results obtained. It is also appropriate that we recall the words of Toppling and Wilson to the effect that "One of the most valuable gifts that an investigator in this field can cultivate is a healthy skepticism, especially if he learns to apply it to his own results and conclusions as well as to those of others".

Sulfanilamide has been used in the following types of infection, in many instances with very encouraging results:—beta hemolytic streptococcus, including septic sore throat, cellulitis, otitis media, complications of scarlet fever, puerperal sepsis, erysipelas, and urinary infections; also in meningococcus meningitis, gonorrhea and gas-gangrene.

As a rule the toxic symptoms from sulfanilamide have been slight, but in a number of instances they have been serious and reports of fatalities are increasing. Certainly extreme caution is necessary in the use of this drug. The following symptoms and pathological results have been reported; nausea, lassitude, dizziness, headache, acidosis, cyanosis with sulph- or methemoglobinemia, jaundice, fever, skin eruption, agranulocytosis, and acute hemolytic anemia.

Marshall, Emerson and Cutting have developed a method for determining sulfanilamide concentrations in the blood and urine. The use of this test would show the extent to which absorption of the drug occurs in the individual patient after oral administration. Through correlation of blood and urine levels with clinical response the test should also serve as a necessary index to adequate and safe dosage of the drug.



## SUMMARY

In this discussion I have emphasized and exemplified four general rules which apply in modern drug therapy. They may be summarized briefly as follows:

1. We should revise our thinking periodically about the actions of well known standard drugs and always ask ourselves a few basic pharmacological questions. How do the effects of drugs benefit the patient in disease? How long do the effects continue? Are there wide variations in individual susceptibility? What are the signs of overdosage?

2. When it is advantageous to combine or associate drugs for improved therapeutic effect this should be done with care and precision.

3. We should guard against any self-deception about new drugs which might arise through high sounding names, fancy advertising and pseudo-scientific language.

4. New drugs should have adequate preliminary laboratory study, and then the wise physician will be skeptical enough to believe only that which he can prove by careful clinical tests and observation.

## UNCONTROLLABLE HEMORRHAGE FROM BENIGN PROSTATIC ENLARGEMENT.

### Report of a Case

W. M. Mills, M.D., and O. R. Clark, M.D.

Topeka, Kansas

This patient, G. H., was a colored man sixty-seven years of age. He was referred by Drs. F. C. Taggart, and A. D. Gray, of Topeka, and was admitted to Stormont Hospital March 27, 1936. For three years he had had periods of retention requiring catheterization for relief. For the two years preceding admission he had occasionally passed rather large amounts of blood in his urine. His difficulty with urination had gradually become worse, and for the past week he had been very uncomfortable and had required catheterization daily. The day of admission even catheterization was unsuccessful as the catheter was continuously plugged with clots and no urine was obtained. He was brought to the hospital by ambulance.

When admitted he had a temperature of 98.0 degrees, and a pulse of 116. Mouth, neck, heart, and lungs were all normal for his age. His blood pressure was 132/86. The entire lower abdomen to the level of the umbilicus, was filled by a rounded tender mass—a distended bladder. Rectal examina-

tion revealed a prostate enlarged to four or five times the normal size, and with smooth edges and a firm consistency.

Because of the hemorrhage, and the fact that catheterization had not relieved the distention, it was thought best to do a cystostomy. Under local infiltration anesthesia the bladder was opened, a large quantity of clots and urine cleaned out, and a large Pezzar catheter put in the bladder. The operation was done soon after admission, in the early morning hours of March 27, 1936.

Through the remainder of that day he passed a considerable quantity of blood clots through the tube, and some blood from the urethra. There was an adequate urinary output, and he was much more comfortable. His blood urea was 40 mg. per cent.

On March 28 the urine contained only a few clots, but still some blood. He was more comfortable, and was eating a soft diet.

March 29 the urine was more nearly clear in the morning, but in the afternoon he began to pass larger quantities of blood—some in clots—and his pulse rate increased to 140. There was a distinct pallor of the mucous membranes. Attempts to remove the clots from the bladder by irrigation through the catheter were unsuccessful. About 7 P.M. he was given a transfusion of 825 cc. of blood, the catheter removed, and the bladder evacuated by sponge forcep. During this procedure it was noted that there were fresh clots mixed with the darkened clots of old blood—in other words the bleeding was increasing in amount in spite of his transfusion.

As conservative measures, including drainage and transfusion, had shown no effect on the hemorrhage, it was thought best to give him another transfusion and do a prostatectomy in an attempt to control the bleeding. He was given another 700 cc. of blood and suprapubic prostatectomy done under spinal anesthesia. The bladder was full of clots. After these were removed, the prostate was found to be enlarged to make a mass easily the size of an orange. As soon as enucleation was completed, the bleeding was insignificant. A Pilcher bag was put in the prostatic fossa, and distended with water to further control bleeding. At the close of the operation his systolic blood pressure was 100 mm.

Microscopic sections of the prostate were reported as "adenoma of the prostate".

The following day (March 30), his temperature was 100 to 102 degrees, and his pulse around 110. The urine draining from the tube and into the dressings was slightly bloody, but contained no clots. He was taking water well by mouth, and this was supplemented by intravenous glucose and saline.

On March 31, he was secreting a good quantity of practically clear urine, and his temperature was normal in the morning. He was somewhat irrational, but his condition seemed as good as one would have anticipated. The water was let out of the Pilcher bag, and the tension through the urethral tube was released. That afternoon his temperature rose suddenly to 105 degrees, he was unable to take even water, and he was semi-comatose. There were bubbling rales posteriorly over both lungs, and tubular breath sounds over the left lower lobe. He became progressively weaker and about noon of the following day (April 1), died.

In this case the essential facts are that he was suffering primarily from an acute urinary retention associated with hemorrhage into the bladder from an enlarged prostate (benign). Suprapubic drainage and transfusion did not control the bleeding, and suprapubic prostatic enucleation was performed as an emergency measure. Following the operation bleeding was minimal, finally ceased, and urinary output was adequate. There is every reason to believe that if he had not developed a bronchopneumonia he would have made a recovery.

The case is reported because of its unusual characters, there being only fifteen similar cases in the literature according to a survey by Shivers in 1935. If any conclusion could be drawn from one case, it would be the same as that of Shivers—that prostatectomy is the proper treatment for hemorrhage from a benign prostatic hypertrophy, if it cannot be controlled by any other, less radical measures. A very comprehensive survey and bibliography of the literature on this unusual type of case is to be found in the article by Shivers.

#### BIBLIOGRAPHY

Shivers, Charles H. DeT.—*Journal of Urology*. 34:417. November 1935. "Uncontrollable Hemorrhage from Benign Prostatic Enlargement".

## PURE FOOD AND DRUG ACT

Hon. Edward H. Rees  
Emporia, Kansas

Editor's note. It is believed that the following speech, made by the Hon. Edward H. Rees, of Emporia, Kansas, in the House of Representatives of the United States, on August 3, 1937, will be of interest to the members of the Kansas medical profession. This speech outlines very clearly the defects in the pending legislation concerning pure food and drugs, as well as the shortcomings of the law now in force.

Mr. Speaker, under leave given me by unanimous consent of the House, I want to call attention of the Members of Congress to legislation that has been

so sorely neglected and omitted from consideration by this Congress during the seven months we have been in session. We have been interested in legislation that affects the economic side of living. We are interested in hundreds of other legislative proposals, but have given practically no attention to legislation that affects the health of the 130,000,000 people of this country.

I refer today in particular to the pure food and drug legislation that is now pending before this Congress, and upon which practically nothing has been done during the entire session.

The pure food and drug law now in force was enacted by Congress in 1906. It is one of the greatest steps that has been taken by Congress covering this problem in many years. This law, after all, was a compromise measure, which was the best that could be put through at that time against the opposition by the industries which were affected. These industries were sure at that time that they would be ruined by reason of its enactment.

The law was not written by experienced draftsmen in the first place, but by a group of well-intentioned amateurs who followed the New York law. The original draft of the Federal law was amended and changed before it was ever seriously considered by Congress. Naturally such a law did not anticipate many modern commercial practices, and made no provision for them. These omissions have offered handicaps to public protection. Many weaknesses have been discovered by enforcement officials in their efforts to administer the statute, and many defects have been brought to light by reason of judicial interpretations.

And yet, during the thirty-one years this measure has been in force, it has been amended only four false and fraudulent claims on patent medicine labels. In 1913 the net weight act required a declaration of quantity on the labels of food products. In 1930 the law was amended to authorize a minimum standard of quality, content, and fill of container of canned goods. Then, in 1934, there was an amendment authorizing supervision of the production, packing, and labeling of sea food.

These are the only changes that have made in this law for more than thirty years. During the last four years especially, bills have been pending before Congress that have provided in a large measure for the constructive amendment and enforcement of this law, but in every case the measures have either been killed in the committee, or have been amended in such a way as to destroy their effectiveness.

We have had several bills introduced in the present session, one of which—the Copeland bill—after severe emasculation, passed the Senate and is now



in the hands of the Interstate Commerce Committee of the House. I am informed that it has been subjected to such other and further revision and amendment by this committee, that its passage would be of more harm to the people of this country than any good that could be accomplished.

I would like to point out briefly some of the principle defects in the Pure Food and Drug Act, as it appears at the present time:

In the first place, the criminal penalties provided by this act are so light that they seem to be regarded by some manufacturers as license fees. For instance, Armour & Co. has been fined as little as \$10 for shipping decomposed poultry. There are instances where the penalty has been even less. The courts are not entirely at fault. The law itself is not sufficiently strict in this regard.

The present law should provide a more definite and conclusive definition for drugs. The present definition for the term drug fails to cover drugs invented to alter the structure or function of the body, as well as those intended for diagnostic use. The law does not cover therapeutic or diagnostic devices.

Cosmetics are not covered by the law, although eyelash dyes, hair dyes, hair tonics, hair removers, and skin bleaches are often dangerous to the user. The ingredients of cosmetics should be listed in their proportions on the label.

The present law should be changed to require that products sold under names recognized by the United States Pharmacopoeia or National Formulary, which vary from the official standard of strength, should state definitely how they vary. No variation in the quality or purity should be permitted.

The provision relating to the adulteration of drugs should be corrected, so as to control drugs which may be dangerous, even when used according to directions. This should be done in order to safeguard the public from unsafe preparations, such as dinitrophenol used as a reducing agent, or cinchophen in rheumatism remedies—both of which are dangerous when used by amateurs.

The addition of metallic trinkets to confectionery, usually consumed by children, should be forbidden.

Legal standards of identity should be provided in the enforcement of measures affecting the adulteration of foods.

In all cases fines and prison sentences should follow the conviction for false advertising, just the same as they do in the violation of other provisions. Injunction proceedings are too weak to provide any real protection for the consumer.

The law should be extended to cover advertising. There should be proper procedure for the control of

false advertising through magazines, newspapers, and other sources. It appears that advertising has not heretofore come directly within the jurisdiction of the act. Advertising is an extension of the label. The same questions arise in dealing with false advertising as are involved in determining the adulteration of a product and the falsity of its label. These questions involve three offenses—adulteration, misbranding, and false advertising. They are intimately interwoven and should not permit of separate treatment in the administration of the law.

These, together with other suggestions that have been submitted to this Congress, should be followed in considering amendments to the present law. Furthermore, the questions involving advertising and labeling of goods should be under the control of the Pure Food and Drug Division of the Department of Agriculture. This Division was set up to enforce the adulteration and misbranding provisions of the Federal Food and Drug Act for the benefit of consumers. While it is true that the interest of the honest manufacturer is ultimately identical with that of the consumer, the welfare of the consumer should be of primary concern under this law.

There should not be a division of responsibility between the Pure Food and Drug Administration and that of the Federal Trade Commission. The Federal Trade Commission was established for the purpose of preventing unfair competition among business organizations and to prevent a monopoly in trade. It was intended, when the pure food and drug bill was drawn, that the regulation and enforcement of the act, insofar as adulteration and misbranding were concerned, should be under the control of the Pure Food and Drug Administration. If the Commission and the Administration are permitted to deal with the same subject there is too much likelihood that the ruling of one agency might nullify the ruling of the other. Furthermore, it is much more effective to hold one agency absolutely responsible for the administration of the measures that come under its control.

As I have previously suggested, the Pure Food and Drug Administration can conduct enforcement activities in these highly technical fields, because it has available at all times experts upon whom it can rely for factual information and technical advice. The records show that the Administration has been effective, even though it has been limited in its operations.

The seize and desist method of law enforcement is not effective in the protection of the public from false advertising. Civil proceedings, such as injunctions, are not effective. We should give the accused a fair trial. If innocent he should be released. If



guilty, we should make the punishment both sure, sufficient, and effective.

I would like to direct your attention to a treatise by Ruth deForest Lamb, on the truth about food and drugs, in her book entitled *American Chamber of Horrors*. This book gives a comprehensive study of the Food and Drug Act, and gives many startling examples of the violation of the spirit and intention of this law.

I have called your attention to some of the more important provisions that I believe should be included in a bill to amend the Food and Drug Act and make it really worth while. Honest manufacturers and honest dealers have nothing to fear by such legislation. They should favor it. Newspapers that want to protect their readers from false and misleading advertisements should support this legislation. This is legislation that is not political. It is not sectional. It is legislation that is for the best interests of all the people. It does not even create a new bureau or board. It is legislation that has the urgent support of both major political parties. As a matter of fact, the President had this legislation on his must list four years ago. Bills designed to meet the immediate needs and the protection of the consuming public have been pending in this Congress for four years.

Let this House not be influenced by selfish influences and powerful interests. This House should pass a real, honest, constructive, enforceable pure food and drug bill—having in mind the 130,000,000 American consumers of this country who are looking to this Congress for protection against those influences which would put their economic gain above the welfare of the people of their land.

Members of Congress, I believe this is one of the most important obligations we have to assume. It is a responsibility that we should discharge to the very best of our ability. To meet this responsibility it is for us to pass a fair and effective pure food and drug act during the present session of Congress.

## FRACTURES OF THE LOWER MARGIN OF THE ORBIT

### REDUCTION AND VISUALIZATION BY X-RAY

A. C. Eitzen, M.D.

Hillsboro, Kansas

With the high speed of motor cars, fractures of the facial bones are becoming more frequent. Those of the lower margin of the orbit, commonly the orbital portion of the malar, offer an especial problem.

They can easily occur without any break in the skin and cause deformity by an unsightly dimpling of the skin over the depressed fragment.



Fig. 1. Hook to reduce fragment, actual size.

The treatment is not altogether standardized. Open operation is suggested in some of the textbooks but if the fracture is not too bad the scar thus caused will be as objectionable as the deformity of the fracture. Hence the following method is suggested, though it is not hoped that it will always be applicable.



Fig. 2. A 5"x7" film is held between the teeth by the patient. The rays make an angle of about 30 degrees with the perpendicular of the face.

If seen early the site of the depressed fragment is marked by dimpling. Later edema hides this. One must then palpate for it. The skin, subcutaneous tissues and periosteum or the site of the fragment according to the technic for local anesthesia in other fractures, are injected with novocain solution. With a sharp pointed knife a stabwound is made not over 3 mm. long directly over the fragment. Through this the sharp hook illustrated in figure 1 is inserted so that it enters the extreme lower portion of the

(Continued on page 23)

## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

Nineteen thirty-seven, with its ups and downs, successes and failures, joys and sorrows has ended. Like the undertrained runner, it started well but ran out of wind near the finish. However, I believe we as doctors fared as well as any other group. We have the personal satisfaction at least of having eased a pain here and there, and of having brought health and happiness into many a home.

As we enter nineteen thirty-eight I know we all resolve to do our best. We should use every means at our command to keep abreast of the scientific and professional phases of our calling, which can be done only by reading our journals and new books, attending the county and district medical meetings, and contributing our share in presenting papers and discussing the presentations of others.

Also we must be alert to the economic side of our profession. To this end a series of twelve meetings will be held, one in each counsellor district, at which time only the business phases of our work will be discussed. The meetings will be under the direction of Dr. E. C. Duncan, Chairman of the Committee on Public Policy and Legislation, and the members of his committee. I urge you to attend these meetings and enter the discussions freely.

Let us all work together to make nineteen thirty-eight a most constructive year.

May I extend to each of you my personal wish that the New Year may be a Happy Year.

J. F. Gsell, M.D., President.

---

## EDITORIAL

---

### THE NEED FOR A PHILOSOPHY

Dr. Roy R. Kracke, Professor of Pathology at Emory University School of Medicine, in his presidential address before the American Society of Clinical Pathologists, takes occasion to discuss the future of pathologists in the general scheme of medical practice.

Dr. Kracke entitles his essay "The Future of Pathology" but in the first paragraph he makes it evident that his chief concern is the economic status of pathologists who are forced to occupy salaried positions either on a full or part-time basis. He regards this as a serious factor contributing to the economic instability of pathologists. He also cites other factors; the wide spread facilities of state boards of health, county and municipal laboratories furnishing free laboratory service; the employment of non-medical laboratory workers by practicing physicians who would make money out of maintaining laboratories for their own profit at the expense of inferior work. Another factor is the existence of private laboratories conducted by technicians who are not medical graduates. He also points out that a large number of physicians are practicing medicine without any laboratory aid. Hospital administrators seeking to reduce expenses employ young physicians of meager training in pathology, obtaining such services cheaply while young men establish themselves in practice in the community. Another factor that Dr. Kracke deplores is the employment of pathologists from foreign countries. He objects to these men because they are not always well trained and because they are willing to work for exceedingly low wages.

Dr. Kracke states that business depression is the final factor in the downfall of the pathologist because it has become necessary to provide medical care at low cost. The pathologist, he feels, "has been sold down the river of socialized medicine" by the medical profession. As a result there are few young men going into pathology as a specialty. He regards this as a bad omen for the future of scientific medicine. In the tone of retaliation he makes this concluding

statement, "The pathologist of today, if he is concerned with the future of scientific medicine, could with justification plead for the institution of federalized medicine as the best means of saving it."

In his essay Dr. Kracke shows a confusion of mind. In a world where confusion and frustration affects so large a part of society this is not surprising. Economic security is what we all desire. In fact, this lack of security is the cause of all the political and social unrest. What individual doctors regard as the best means of preserving the integrity of scientific medicine is a matter not of the expediency of the moment, but of ideology. We need to give serious consideration to our social aims and develop our philosophy in the light of the social changes that have come over the world.

Society has always made demands upon the medical profession. So much is this true in the amount of free medical service that has been required of workers in all departments of medicine, that the word charity has worn off its connotation of benevolence.

The science of medicine should take its place as a factor of the greatest importance in the cultural development of the population. Through education the public will recognize the necessity of medical science. Toward this end a constructive social philosophy based upon the long view of social growth is necessary to the security of life and the future of medical science. The positive aim and decisive action of the medical profession in the application of such a philosophy will insure the rewards for service in terms of economic security.

---

### JOURNAL CHANGES

This issue marks the adoption of several changes in The Journal, which the Editorial Board feels will offer certain definite advantages, both in appearance and practicability. The more important of these innovations are; new type face throughout, size enlargement and cover style.

The new type used is not only believed to be more symmetrical and legible, but is available in all sizes in both light and bold face, thus allowing for better display and more uniform page appearance.

The enlargement in size was decided upon in



order to make The Journal conform more nearly with the other thirty-two journals published by state medical organizations and the Journal of the American Medical Association. This change should be of assistance to advertisers in that the same plates used in the Journal of the American Medical Association and several other medical publications can be used in this Journal. It is also felt by the Board that the wider margins resulting from this change in page size permit better balance and appearance of type pages.

The cover changes were dictated chiefly by a desire for more attractive appearance. Major difference here is removal of the border and use of colored ink.

The Editorial Board sincerely hopes that these changes will be approved by Journal readers. Foremost policy of the Board is that content and appearance of The Journal shall be dictated by the membership. Hence it earnestly seeks at all times suggestions wherein improvements of any kind can be made.

---

## THE WOMEN'S FIELD ARMY AND THE PHYSICIAN

After a year's experience in nearly forty states the Women's Field Army Against Cancer of the American Society for the Control of Cancer is extending its work into practically every state. This program is unique in the history of health education movements in that from the beginning the medical profession has been asked to direct the work. In every state lay leaders have been appointed only with the approval of medical organizations.

In this Women's Field Army plan lay speakers are discouraged from speaking on the scientific aspects of cancer. This phase of the program has been placed in the hands of physicians in the belief that a physician is the properly qualified person to discuss this subject before lay groups. The activities of lay workers are restricted to organization and other problems. It is thus seen that the program is being developed along lines most favorable to the physician. By this same token there is placed on the physician the responsibility of making the program as effective as possible.

The program is built around the fact that early cancer is curable, and to detect it in early stages the periodic examination of the apparently well individual must be employed. As a result of the public discussion of this subject thousands of persons for the first time have sought examination by their physician to determine the presence or absence of cancer. As the program develops thousands more will ask for this same service. This makes it essential that physicians be on the lookout for precancerous lesions as well as signs of early cancer, and conduct these examinations in as thorough and painstaking a manner as possible. A patient requesting such an examination is entitled to the best service the physician can give, regardless of objective absence of disease. After obvious signs of cancer appear it is often too late to render a curative service; therefore, no physician should make light of any patient's request for an examination.

No physician should hesitate to avail himself of facilities for obtaining the answer to the patient's problem when such facilities are not at his immediate disposal. The diagnosis and treatment of cancer is a group problem, and no physician has the ability alone to cope adequately with all forms of the disease.

One criticism emanating from medical sources is that a lay cancer educational program will create a cancerphobia in the public mind. In answer it should be remembered that an intelligent request for information about cancer is not cancerphobia; also, that cancerphobia never metastasized and never kills.

Another criticism coming from a few laymen is that this emphasis on periodic examinations is but a dodge on the part of the medical profession to increase its income. Such criticism should not be taken seriously, and should be answered by pointing out that only by early diagnosis and treatment can the cancer patient be saved from an untimely death. If the profession wanted to profit from this situation it could do so in far greater measure by neglecting the early stages of cancer knowing that the care of the incurable patient would be far more prolonged and remunerative.

With this opportunity for constructive participation in a nation-wide health education movement the physicians of Kansas should see to it that no

patient is denied the fullest measure of service within the power of physicians to render. Only by such a service can they expect to retain direction of this program.—F. L. Rector, M.D.

## CONCEPTION IN A WATCH GLASS

The limiting barrier between what we know and what we do not know—between scientific knowledge and ignorance—regarding the field of reproduction is put under great strain and may give way entirely as a result of a recent discovery. The "brave new world" of Aldous Huxley may be nearer realization. Last year Burr, Hill and Allen showed that ovulation in the rabbit was accompanied by a demonstrable electrical change, and as was prophesied then, the same is now found to be true in human beings. In this issue of the *Journal*, Rock, Reboul and Wiggers tell of a change in electrical potential between two electrodes, one placed on the abdomen and one in the vagina, which is of such duration and extent as to make the moment of ovulation easily determinable. The significance of a series of such observations for the control of human conception is quite apparent. What is the time relation between ovulation and menstruation? Is it so definite and constant as to enable women to know when they are fertile and when infertile from a record of their menstrual dates? There has been much indirect deductive animadversion to these questions. It would seem as if we were now furnished with a direct objective yardstick.

Contemplating this new discovery, one's mind travels much farther. Lewis and Hartman have isolated a fertilized monkey ovum and photographed its early cleavage in vitro. Pincus and Enzmann have started one step earlier with the rabbit, isolating an ovum, fertilizing it in a watch glass, and reimplanting it in a doe other than the one which furnished the egg, and have thus successfully inaugurated pregnancy in an unmated animal. If such an accomplishment with rabbits were to be duplicated in human beings, we should, in the words of "flaming youth," be "going places."

The difficulty with human ova has been that those recovered from tubes have regressed beyond the possibility of fertilization in vitro. But by

utilizing the electrical sign we may be able to obtain them from the follicle at the peak of their maturity. If the new peritoneoscope can be developed along the lines of the operating cystoscope, laparotomy may even be dispensed with. What a boon for the barren woman with closed tubes! Walton is quoted as saying that it is theoretically possible to separate male-determining from female-determining spermatozoa. Will it be possible to obtain son or daughter, according to specifications, and even deliver them of woman who are not their mothers? Truly it seems as if the forge were being warmed, and another link may be welded in the chain by which mankind strives to hold nature under control.—The New England Journal of Medicine, October 21, 1937.

## EYE, EAR, NOSE & THROAT

### OPHTHALMIA NEONATORUM\*

Lyle S. Powell, M.D.

Lawrence, Kansas

Since Crede's pioneer work in the prophylaxis of ophthalmia neonatorum in 1884 there has been a tremendous reduction in the number of these cases. Ernst Fuchs in his prize essay of 1884 quoted the statistics of Crede to the effect that 10.8 per cent of all babies born in the Leipzig Clinic has ophthalmia neonatorum and following the use of silver nitrate the incidence of blennorhea dropped to from .1 per cent to .2 per cent. This is a remarkable result. Since that time, however, there has been, generally speaking, no further reduction in the number of cases, either here or in Europe. The fact that there are so many different drugs being substituted at the present time for Crede's original silver nitrate solution indicates that none of them are quite satisfactory.

Crede's original technique calls for the administration of two per cent silver nitrate directly on the cornea of the eye over the pupillary area by means of a glass rod. Since that time this technique has been quite generally modified. At the present time the silver nitrate is seldom applied directly to the cornea; rather, it is dropped in the conjunctival sac. Usually the solution is one per cent instead of two per cent. Numerous colloidal silver solutions and

\* The Committee on Conservation of Eyesight has been kind enough to offer to contribute material for a frequent section on Eye, Ear, Nose and Throat. The Editorial Board desires to acknowledge with appreciation this article, which is the first of the series.



other drugs have been substituted for the silver nitrate.

Recently twenty articles on this subject were reviewed and abstracted. In fifteen of these articles the use of silver nitrate was recommended. In three it was considered ineffectual. In the remaining two articles the authors were non-committal as to the drug used, placing more emphasis upon the technique of administering the drug and the cleansing of the eye. In the vast majority of cases, one per cent silver nitrate was used instead of the two per cent originally recommended by Crede. Some of the substitutes for silver nitrate were silver acetate, alum, tannic acid, copper sulphate, zinc sulphate, bichloride of mercury, potassium permanganate, argyrol, mercurochrome, mercurophen and many others. Several of the authors called attention to the fact that ophthalmia neonatorum does not only include those cases of gonorrheal origin but many due to inclusion bodies, penumococcus, streptococcus, staphylococcus, Morax-Axenfeld bacillus and many others. The end result from these non-gonorrheal infections may be just as tragic as those from gonorrheal infection.

A number of articles abstracted stressed the careful cleansing of the eyes with a bland solution before applying the prophylactic drug to the conjunctival sac. The technique of instillation was regarded as important, especially so that the solution would not be flicked out of the conjunctival sac by the lashes or lid reflex. Several expressed the opinion that a single application of any germicide, no matter how powerful, was insufficient to control or prevent the disease. Two of the authors laid particular stress upon the effect of trauma to the lids, especially when the lids are turned. One author believes that any drug to be effective as a prophylaxis in ophthalmia neonatorum depends more upon its ischemic than its bactericidal qualities. He advises the use of two per cent solution of cocaine to produce a blanching of the lids. One author makes a point of agreeing with S. A. Gifford in a statement that argyrol can only be considered as an irrigation, and that the effectiveness of such a solution depends upon the coagulum produced and extruded by this solution from the conjunctival sac. One author stresses the use of prolargol and argyrol as adjuvants to the silver nitrate treatment. He says "when argyrol is used in these strong solutions we must not lose sight of its mechanical action in actually lifting the pus out of the cul de sacs."

Several of the authors paint a rather gruesome picture of midwifery and point out that in large cities a great proportion of the patients are attended by midwives. In our state a large number of births are attended by cultists and midwives, as is evi-

denced by the following table furnished by the Kansas State Board of Health.

Year	M.D.	Cultists	Midwives
1933.....	29,654	1,309	182
1934.....	30,810	1,607	191
1935.....	29,137	1,783	125
1936.....	28,374	2,086	82

More or less strict regulations are in force practically everywhere in the civilized world regarding the prophylaxis of ophthalmia neonatorum. It is agreed that one of the major difficulties lies in enforcing the use of an effective prophylactic solution. Several of the laws have qualifying clauses which render the law inoperable in certain cases. One of the articles reviewed referred specifically to the Kansas law as having certain qualifying conditions. The Kansas law, p. 65-153b and 153c is as follows:

"65-153b. Newly born infant; treatment of eyes. Any physician or any person authorized by law to act as an obstetrician shall immediately upon the birth of an infant instill into the eyes of such newly born infant a prophylactic solution approved by the state board of health: Provided, however, That any person or parent shall not be required to employ such prophylactic if objection is made by written statement to the attending obstetrician within three days from the birth of said child: And provided further, That said written statement shall be attached to the birth certificate."

"65-153c. Duty of physician and others. That any physician or any person authorized by law to act as an obstetrician in this state or any other person having the care of an infant, within six months after its birth, who shall detect any inflammation, swelling or redness in the eyes of any such infant or any unnatural discharge therefrom, shall, if he be a physician, treat such child with the necessary prophylactic, or, if he be other than a physician, shall immediately report the condition and the location of such infant to the local board of health."

At the second quarterly meeting, December 20, 1929, the following resolution was passed by the State Board of Health:

"Whereas, under chapter 218 of the Session Laws of 1929 it is provided that any physician or any person authorized by law to act as an obstetrician, shall immediately upon the birth of an infant, instill into the eyes of such newly born infant a prophylactic solution approved by the Kansas State Board of Health, subject to exception therein enumerated, and whereas it is also provided in said chapter that it shall be the duty of the State Board of Health to make the necessary regulations for the enforcement of the same; now, therefore

"Be it resolved, by the State Board of Health in regular session assembled that the said prophylactic solution shall consist of a one-percent solution of silver nitrate."

#### SUMMARY

1. It seems evident that silver nitrate solution has proven effective in the prophylaxis of ophthalmia neonatorum.



2. Silver nitrate one per cent is used more often than silver nitrate two per cent and it should be dropped in the cleansed conjunctival sac and not directly on the cornea.

3. The physicians of Kansas should determine whether the present law is effectual.

---

## TUBERCULOSIS ABSTRACTS

---

### GASTRIC LAVAGE

Gullbring and Levin of the City of Stockholm Tuberculosis Hospital at Söderby, after reviewing the literature on gastric lavage for the recovery of tubercle bacilli, report the results of gastric lavage in a series of 348 adult tuberculous persons in whom there was an absence of sputum, or who were bacillus-free when tested by the usual methods.

#### TECHNIQUE

Gastric lavages were made on a fasting stomach with 100-200 cm. of sterile water with sterile tubes and vessels. The sputum-like constituents were separated from the lavage water by means of sedimentation and centrifugation and the centrifugate was examined by means of:

- a. Direct preparations on the sediment stained according to Ziehl-Neelsen
- b. Cultures on egg substrate according to Hohn's method after pre-treatment with 10 vol. per cent  $H_2SO_4$
- c. Inoculation on guinea pigs, which were examined post-mortem after six weeks.

A test was considered positive whether culture alone, or the guinea pig test alone, or both at the same time were positive.

The guinea pig test proved to be the most sensitive. Only in a small number of cases were the cultures alone positive. A single negative lavage is but slight proof of the absence of tubercle bacilli, therefore the patient should be lavaged two or three days following the first test in order to obtain more certain results and to make the period of waiting for the results as short as possible. This method, however, is too expensive for routine practice and the authors propose a further simplification as follows: The patients are lavaged on three successive days but the lavage fluids from each day are saved, and the total sediment is injected into one or two guinea pigs. This ensures optimal results at no great expense.

### CLASSIFICATION

Disregarding all pathological-anatomical considerations, the authors divided the cases into four groups:

- I. Those with apparently fresh alterations (Ranke's primary and secondary stages)
- II. Those with alterations of older appearance (Ranke's tertiary stage)
- III. Pleuritic cases with large exudates
- IV. Pneumothorax cases

All of the 348 tuberculous cases studied in this investigation were either without sputum or had been proved to be bacillus-free by other current methods of examination. Group I comprised principally patients of about twenty years of age who exhibited primary complex with fresh infiltrates in the pulmonary area and corresponding swelling of the lymphatic glands. In some cases only an enlargement of the hilus gland was found. In this group of ninety-seven cases fifty-five (fifty-seven per cent) were positive by gastric lavage.

Group II is the largest and, from the practical point of view, incomparably the most important. It includes cases with clinically established tuberculosis, most of which were of the older productive cirrhotic forms. Of the 141 cases without cavities, forty-three exhibited bacilli and in the sixty-six cases with cavities, bacilli were found in ninety-four per cent.

The social implications of these findings are important. These types of cases are generally regarded as "closed" or healed tuberculosis cases and not a menace to others, yet apparently about one-third of them excrete tubercle bacilli from the lungs. It appears also that practically all cases with cavity formation are also bacillus carriers whether sputum is present or not and whether tubercle bacilli can be demonstrated in the expectoration or not.

Group III comprises the extensive pleuritis cases where the pulmonary contours lying posteriorly could not be judged. In all these cases the appearance of the exudate was the first symptom of the outbreak of the tuberculosis. Seven cases out of twenty-five (twenty-eight per cent) were positive.

Group IV were cases lavaged during or after pneumothorax treatment, including cases in which the lung was either compressed or relaxed and some possibly healed. Of the nineteen cases examined eight (forty-two per cent) were positive.

For the entire group of 348 cases supposed to be bacillus-free, fifty-five per cent were shown by gastric lavage to be excreting tubercle bacilli.

### VALUE OF GASTRIC LAVAGE

The gastric lavage method for adults has several clinical and social advantages for it is the most

sensitive test we know of for proving the excretion of tubercle bacilli from the lungs. From the diagnostic point of view it is valuable particularly in cases of pleuritis and in cases in which the roentgenological evidence is doubtful. It is often difficult to decide whether a lung infiltration is to be interpreted as tuberculosis, pneumonia, a limited pleuritic effusion, or a tumor formation. Ring shadows, enlarged intrathoracic glands and other conditions may be confusing.

Therapeutically the test helps to judge indications for active treatment and pneumothorax, particularly. Early collapse is often strongly indicated but proof of tuberculosis activity is insistently demanded before instituting so radical a treatment as pneumothorax. To wait several months until unquestionable symptoms appear may mean loss of the golden opportunity. If tubercle bacilli are found by gastric lavage, it means that there is pathological activity somewhere and that active measures are called for.

The test is of importance when the question of discontinuing pneumothorax treatment arises. A positive result by the lavage method means that healing is not complete and that, therefore, treatment should not be discontinued. In questions of whether or not to perform thoracoplasty and whether to induce abortion in tuberculous persons, the lavage test helps to arrive at a decision.

From the point of view of infection the test is of great significance. The main task of the campaign against tuberculosis is to diminish the risk of infection and to eliminate the sources of infection. Whether or not children in whom tubercle bacilli are found by lavage are infectious, is still under lively discussion and the question is not finally settled. But unquestionably, the demonstration of tubercle bacilli in the stomach of an adult always implies a damage to the parenchymal or bronchial wall and certainly such a person should not be certified as free from the possibility of transmitting the disease. As a routine procedure, a certificate may justifiably be granted if there is no sputum or if repeated examinations of sputum show it to be bacillus-free. But in the case of teachers and other adults in close association with children, a gastric lavage should be performed (in addition to other tests) before issuing the certificate.

The authors feel, that in view of these surprising results, the borderline between "open" and "closed" tuberculosis is now obliterated.

The Importance of Gastric Lavage for the Demonstration of Tubercle Bacilli in Adults, Alf Gullbring and Nils Levin. *Acta Medica Scandinavica's Förlag*, Stockholm, Vol. XCIII, fasc. I-II. 1937.

---

## MEDICAL ECONOMICS

---

### THE ART OF SPEAKING

Good speakers are made, not born. Without exception, they like to talk and know the rules. All of them realized early in their careers that if they wanted to make good speeches they had to make an effort to do so. They never stop experimenting with their technic, because good speech is an art which can be developed. Physicians must be prepared to express their ideas to others. As with other professional groups, we have a considerable number of good speakers, and those who do not do so well. If anyone has any reason to doubt his speaking ability, he should first admit his deficiencies and then try to correct them. As a general rule, the better the speaker, the more conscientious he is in attempting to improve his speech. Some of the suggestions which follow may be helpful—at least, I have found them so.

The subject of a talk is most important. When you are invited to speak, it is assumed that you have something to offer. The same is true if you request an opportunity to be heard. It is best to select a simple subject upon which you have a certain amount of information.

Every speech should have a purpose. After you have selected your subject, being guided by the type and interests of your audience, write down in a few words the reason for your selection. Just because you have observed something which is uncommon in your experience is a very poor reason for giving a talk. The best subject for the average man to attempt is some common condition. In it, he should correlate his own experience with that of others. It is assumed that his audience knows a considerable amount about his subject. His hope is to bring their knowledge up to date by various additions and subtractions to current concepts.

The next step is to outline your speech. Select from four to six points that you would like to make and stick to them. It is very disheartening to an audience to listen to a speaker try to condense everything known about a complicated subject into a fifteen-minute period. After they have made their outline, some speakers write their entire speech at once. Most lecturers, however, find it more desirable to write their speeches after they have spent most of their time thinking over the points they intend to make.

Extemporaneous speech is the ideal form. The word is often misunderstood as it is confused with impromptu speech. Extemporaneous speech means



"speech delivery out of the moment." It is thinking on our feet as the result of long and adequate preparation. It is not memorized speech. Preparing a speech is a thinking process of high order. It requires sustained effort and mental concentration. On rare occasions a manuscript should be read. Even though a manuscript is required for future publication, it is unfair to an audience to have them sit and listen to something which they can later read in a medical journal. We analyze an article when we read it; therefore, the only reason for reading a paper in advance of publication is to attempt to give the personal touch to our views.

Most good speakers are not orators. They follow the conversational mode, which is effective speech in any situation. A person who is a good conversationalist, with very little change in his technique, can become a good speaker. In conversation, we do not speak in a monotone or continue after it is very obvious that our listeners are becoming bored.

Do not try to be funny. The average speaker imagines that he must start with a story, but finding a good story that just fits the occasion is an undertaking beyond the scope of most of us. If your story is very good and well told, it may hurt you rather than help you. If your story is poor, it is giving yourself an unnecessary handicap.

Avoid an extravagant style of speaking. Use short, simple sentences. If you find yourself in an involved statement, it is best to stop and start over. Many speakers bury their thoughts in a barage of words, loosely coupled together in long, meaningless sentences. We should attempt to make comprehension easy, not difficult.—Bulletin Hennepin County (Minn.) Medical Society, August 25, 1936.

## FRACTURES OF THE LOWER MARGIN OF THE ORBIT

(Continued from page 15)

orbit point directed downwards. It is pushed in far enough so that the fragment can be hooked and pulled forward until one can feel it in line with the rest of the lower margin of the orbit. It will tend to stay without any fixation. This leaves no scar.

These fractures and their displacement are not easy to demonstrate by x-ray and if the result is good it may be hard later on to prove there was one in the first place. However, the technic illustrated in figure 2 will show the lower margin of the orbit fairly well on the x-ray film which is held by the patient between his teeth.

A method of reducing fractures of the lower margin of the orbit together with their visualization by x-ray is presented.

## NEWS NOTES

### COUNCIL MEETING

The annual mid-winter meeting of the Council will be held at the Hotel Lassen in Wichita on January 30, commencing at 10:00 a.m.

All members interested in the meeting are invited to attend.

### OSTEOPATHIC LITIGATION

The Kansas Supreme Court recently announced that it had honored a motion in the case of State vs. B. L. Gleason to try the law in advance of the facts.

Decision was also made that the following questions of law shall be determined:

1. Is the osteopathic statute prospective in operation or are the osteopathic physicians limited to the state of the science and art as taught and practiced in 1913 when the statute was enacted?

2. What judicial construction should be put upon the words "anatomy, physiology, physiological chemistry and toxicology, pathology, diagnosis, hygiene, obstetrics and gynecology, surgery, principles and practices of osteopathy" as used in the osteopathic statute? (65-1201)

3. What judicial interpretation should be put on the phrase "as taught and practiced in the legally incorporated colleges of osteopathy of good repute" as used in the osteopathic statute? (65-1201)

4. Does the osteopathic practice act define osteopathy?

5. If the osteopathic practice act fails to define osteopathy is it void for uncertainty?

6. Does the osteopathic practice act delegate to the legally incorporated colleges of osteopathy the right to determine standards and scope of practice of osteopathy in Kansas?

7. If the osteopathic practice act does so delegate, is it void as an unconstitutional delegation of legislative power?

8. Are osteopathic physicians in Kansas licensed to administer drugs, and narcotic and practice surgery under the provisions of the osteopathic practice act?

9. What judicial interpretation should be put on the phrase "This act shall not apply to any registered osteopathic physician or any chiropractic practioners of the state of Kansas, or any commissioned medical officer of the United States Army or Navy or Marine Service, in the discharge of his official duties; nor to any legally qualified dentist, when engaged in the legitimate practice of his profession;" as used in the Medical Practice Act? (65-1005)

10. Does the petition state a cause of action for a violation of the Medical Practice Act or for a violation of the Osteopathic Practice Act?

11. Can the right of defendant to practice in Kansas be attacked collaterally as in this action or is the proper action one to revoke his license for exceeding the powers granted thereunder?

The attorneys for B. L. Gleason were instructed to file their brief on these questions on or before February 15, and the state was instructed to file its brief on or before



the date of trial. Trial of the case will occur subsequent to the decision of the Supreme Court upon the determination of the above questions of law.

### DISTRICT MEETINGS

The Committee on Public Policy is sponsoring a series of Councilor District meetings in order that organization activities may be discussed with the membership. The dates and places of these meetings are as follows:

First District.....	January 16.....	Horton	1:00 P.M.
		Hotel Grand	
Second District.....	January 16.....	Lawrence	8:00 P.M.
		Hotel Eldridge	
Third District.....	(To be announced later.)		
Fourth District.....	(Meeting held on December 13.)		
Fifth District.....	February 6.....	McPherson	1:00 P.M.
Sixth District.....	February 6.....	Wichita	8:00 P.M.
Seventh District.....	January 23.....	Concordia	1:00 P.M.
Eighth District.....	January 23.....	Salina	8:00 P.M.
Ninth District.....	February 27.....	Colby	8:00 P.M.
Tenth District.....	February 27.....	Hays	10:00 A.M.
Eleventh District )	Combined meeting		
Twelfth District )	February 28.....	Dodge City	8:00 P.M.

Speakers at the Horton and Lawrence meetings will be Dr. L. L. Bresette, Dr. R. W. Urie, Dr. E. C. Duncan, Dr. F. L. Loveland, Dr. W. M. Mills and Clarence G. Munns. Their talks will include legislative activities of the Society, present trends pertaining to the socialization of medicine, indigent and semi-indigent care, information relating to cultists and quacks, and present and future projects of the Society. It is hoped that every member in the First and Second Councilor Districts will find it possible to attend either the Horton or the Lawrence meeting.

### CANCER CONTROL

The Kansas Women's Field Army of the American Society for Control of Cancer is planning a series of meetings to be held over the state as an educational program. These meetings are to be held at the following dates and places:

Oberlin .....	January 11
Hays .....	January 12
Salina .....	January 13
Topeka .....	January 14
Chanute .....	January 20
Wichita .....	January 21
Dodge City .....	January 22

Dr. F. L. Rector, Field Representative of the central district, American Society for Control of Cancer, and Mrs. Marjorie B. Illig, National Commander of the Women's Field Army will be the principal speakers. Dr. Rector will speak at Oberlin, Hays, Salina and Topeka. Mrs. Illig will be the speaker for Chanute, Wichita and Dodge City. These meetings are to be entirely educational and the public is invited to attend.

The Kansas State Board of Health and the Society are cooperating with the Women's Field Army in this program.

### BOARD OF REGISTRATION AND EXAMINATION

The regular semi-annual meeting of the Kansas State Board of Medical Registration and Examination was held at the Kansan Hotel, at Topeka, on December 14, 1937.

The meeting was called to order by the president, Dr. O. S. Rich. Others present were: Dr. H. E. Haskins; Dr. J. F. Henshall; Dr. F. S. Hawes; Dr. J. A. Wheeler; and Dr. J. F. Hassig. The minutes of the meeting held June 15, and the special meeting held in Lawrence, November 13, were both read and approved.

The Executive Committee composed of Dr. Haskins, Dr. Ruble and Dr. Henshall reported favorably on the following named applicants for license by reciprocity, each having paid the required fee, and recommended that a license be issued to each:

Dr. William F. Abramson, Topeka, Kansas  
 Dr. Ralph E. Drake, Wichita, Kansas  
 Dr. Herman A. Gerbig, Dubuque, Iowa  
 Dr. Charles Johnson, Kansas City, Kansas  
 Dr. Douglass W. Orr, Topeka, Kansas  
 Dr. Earl C. Padgett, Kansas City, Missouri  
 Dr. Andrew C. Schoch, Topeka, Kansas  
 Dr. Gordon E. Stone, Hutchinson, Kansas  
 Dr. Leon B. Thomas, Russell, Kansas  
 Dr. Arnold I. Webman, Topeka, Kansas  
 Dr. John W. Wheeler, Kansas City, Kansas

The following named applicants for license by examination, each having paid the fee of \$25.00. and having made the required grade of an average of seventy-five per cent and not less than sixty per cent in any subject will be issued licenses:

Dr. L. A. Donnell, Butte, Montana  
 Dr. Alice A. Pendleton, Kansas City, Kansas  
 Dr. William B. Rost, St. Joseph, Missouri  
 Dr. C. L. Schaefer, Kansas City, Missouri  
 Dr. Byron L. Shifflet, Topeka, Kansas  
 Dr. Jules Weinberg, Leavenworth, Kansas

On motion regularly made by Dr. Ruble, duly seconded by Dr. Wheeler, and unanimously carried, that all members of this Board desiring attend the annual meeting of the Federation of National Boards at Chicago in February, 1938.

The secretary read the following resolution which was unanimously adopted and three copies signed by each member, one to be sent to The Kansas Medical Society, one to the Kansas State Board of Pharmacy and one to be kept in our files.

"At a joint meeting, between the Kansas State Board of Pharmacy and the Kansas State Board of Medical Registration and Examination, held at Lawrence, Kansas, November 13, 1937, it was unanimously agreed that each board recommend to their respective state societies the appointment of a special committee, composed of three members for the purpose of working together in an effort to have a mutual understanding and help solve the problems concerning the two groups thereby firmly cementing the two professions.

"Be it therefore resolved, that the Kansas State Board of Medical Registration and Examination now in regular session at the Kansan Hotel in Topeka, this 14th day of December, 1937, respectfully request The Kansas Medical Society the appointment by the President of such a committee."

The Board unanimously agreed to hold its regular June meeting in Topeka at the Kansan Hotel and the secretary was so instructed to make the necessary arrangements.

Mr. W. H. Haffner of Topeka, who is desirous of practicing hydro-physio therapy and massage, appeared personally before the Board and inquired relative to the law

in reference to his methods of treatment. He was advised by the Board to write to Attorney General Clarence V. Beck for his opinion. Meeting adjourned.

### INDIGENT CARE

The Kansas State Board of Social Welfare announced recently that it had appointed a joint committee, composed of county commissioners, local welfare directors, and the medical profession, to make investigation and recommendation concerning the handling of indigent medical care in the various counties.

The board has evidenced great interest in the need for better solution of this problem and the above action was taken after numerous conferences on this subject with representatives of the Society.

Dr. J. F. Gsell, president, has appointed the following persons to represent the Society in this regard: Dr. N. E. Melencamp, Dodge City, president-elect; Dr. F. L. Loveland, Topeka, chairman of the Committee on Medical Economics; Dr. Gsell; and Clarence G. Munns, executive secretary.

### 1938 MEETING

The program for the 1938 meeting of The Kansas Medical Society has been virtually completed and includes an imposing list of carefully selected men who are outstanding in their fields of practice.

Plans for the comfort and entertainment of the physicians and their wives are being worked out by designated committees of the Sedgwick County Medical Society, host of the 79th annual meeting, which will be held in Wichita May 9-12.

### SHAWNEE COUNTY ACADEMY

The Shawnee County Medical Society, at a meeting held in Topeka on January 3, adopted a rather extensive program for 1938, which was proposed by the Executive Committee of that society.

Foremost feature of this program is the formation of an academy of medicine, to be composed of sections representing the various specialties included in the society. It is the plan that each of these groups will meet primarily for their own benefit as frequently as they wish and will follow any plan of study they may desire. Their meetings will be open to any member of the county society, but only one meeting during the year will be planned especially for the benefit of the members of the society as a whole. At this meeting each section of the academy will be responsible for planning the program of a meeting which will be of general interest to all practitioners. It is not essential that a member affiliate with any of these sections unless he wants to have the benefit of their meetings, but on the other hand, any member may affiliate with more than one section if he so desires. Following is a list of the sections, the chairmen, and the month during which they will be responsible for the county society meeting: Eye, Ear, Nose and Throat, Dr. W. W. Reed, January; Cardiology, Dr. F. C. Taggart, February; Neurology and Psychiatry, Dr. Norman Reider, March; Surgery, Dr. Milton B. Miller, April; Obstetrics and Gynecology, Dr. L. R. Pyle, May; Pathology, Dr. J. L. Lattimore, September; Diseases of the Chest, Dr. F. L. Loveland, October; and Pediatrics, Dr. Lucius Eckles, November.

Another project adopted by this society is the organization of postgraduate courses to be under the direction of the Program Committee, with Dr. Charles W. Tidd as chairman of the sub-committee on Postgraduate Study, and instructors to be members of the society. The first course will be in X-Ray Diagnosis of Disorders of the Chest, given by Dr. A. K. Owen. The class will start during the third week of January, and will meet once a week for six weeks. In March it is proposed to begin a second course, the subject for which has not yet been chosen. There has been a large registration for three other courses which have been suggested to date: Psychoanalysis, Dr. Robert P. Knight; Electrocardiograph, Dr. James Stewart; and Hematology, Dr. John L. Lattimore. Notice of subsequent courses will be made from time to time.

In order to coordinate all of these activities of the Shawnee County Society and its component units, it will issue an official publication known as "The Bulletin of the Shawnee County Medical Society" on the first of each month from September to May. The Bulletin is edited by Dr. L. R. Pyle and the first issue, dated January 1, contains a complete outline of the above programs, as well as dates, times of meeting, place and programs of all society and unit meetings, all Topeka hospital staff meetings, names of officers and committees of this society, also news notes of interest to the members.

In order to take care of the necessary expenses of this enlarged program, it was proposed by the Executive Committee and adopted by the society to raise the local dues from \$1.00 to \$10.00 per year.

The Executive Committee of the Shawnee County Society was first authorized at the September meeting, and adopted as a permanent committee at the annual meeting in December. It is composed of the officers of that society, and three members appointed by the president, and its present membership is as follows: Dr. W. W. Reed, chairman; Dr. F. C. Taggart; Dr. M. B. Miller; Dr. J. L. Lattimore; Dr. W. C. Menninger; Dr. L. E. Eckles; and Dr. L. R. Pyle. The Program Committee includes Dr. W. C. Menninger, chairman; Dr. F. C. Taggart; and Dr. L. R. Pyle.

It is planned to invite members of all surrounding county medical societies to participate in any or all portions of these programs if they so desire.

### STATE VS. COOPER

The case of State vs. Cooper, involving the practice of Cooper as an unlicensed cancer specialist in Altoona, will be heard as an appellate action in the Kansas Supreme Court during the January-February docket.

The brief for the state was filed by Mr. Theo. F. Varner, Assistant Attorney General, on January 3. Defendant's brief has also been recently filed.

Foremost contentions of the defendant are that the injunction law under which he was tried is unconstitutional and that the injunction in this case was arbitrarily and oppressively granted.

### STUDY OF GRADUATE EDUCATION

Dr. Hamilton H. Anderson, a member of the staff of the Council on Medical Education and Hospitals of the American Medical Association, will be in Kansas on January 17 and 18.

Dr. Anderson's visit will be in connection with the study of graduate medical education which is being undertaken



by the above council. He will discuss these matters with various representatives of the Society, the Kansas State Board of Health, the University of Kansas School of Medicine, and the Kansas State Tuberculosis and Health Association.

### COSMETOLOGY MEETINGS

Representatives of the Society held a joint meeting with the Kansas State Board of Cosmetology in Topeka on December 13, and another joint meeting with the above board and representatives of the Kansas State Cosmetology Association in Topeka on January 7.

Foremost topics of discussion were the present legal definition of cosmetology in Kansas and the use of routine Wassermann's by the Kansas State Board of Cosmetology.

### TUBERCULOSIS ASSOCIATION

The Board of Directors of the Kansas State Tuberculosis and Health Association met in Topeka on December 30. At this time the board authorized their association to join with the Committee on Control of Tuberculosis of the Society and the Kansas State Board of Health in sponsoring an educational program on tuberculosis, similar to the cancer programs of recent years. They also authorized the expenditure of association funds up to the amount of \$600.00 for financing such a program.

Officers and directors-at-large elected for the ensuing year were as follows: President, Dr. C. E. Coburn, Kansas City; Vice-presidents, Dr. F. A. Trump, Ottawa, and Miss Luella Taylor, Independence; Executive Secretary, Dr. C. H. Lerrigo, Topeka; Treasurer, Theo. C. Mueller, Topeka; Directors-at-large, Dr. F. P. Helm, Dr. L. V. Turgeon, Dr. F. L. Loveland, Dr. J. F. Fulton, all of Topeka, Dr. C. F. Taylor, Norton, Senator Arthur Capper, Governor Walter Huxman, Chancellor E. H. Lindley, Lawrence, Dr. H. R. Wahl, Kansas City, and State Superintendent of Public Instruction, W. T. Markham.

### HALL OF HEALTH

Among the special features being planned by the host committees of the Sedgwick County Medical Society for the next annual meeting of the Society, to be held in Wichita from May 9 to 12, is an extensive educational exhibit.

This exhibit is designed especially to bring to the laity some concept of the work, progress and value of medicine in aiding humanity and will be known as the "Hall of Health". It will consist of displays showing the basic facts and physiology of man, the curative and preventive phases of disease and the conservation of health. One of the central attractions will be the Camp Transparent Woman, through whose transparent skin one sees the complex internal system of the human body.

The entire main arena of the Wichita Forum, covering some 12,000 square feet, will be given over to the Hall of Health for a ten day period from May 7 to 17.

The committee, upon whom falls the task of assembling and supervising the Hall of Health, is comprised of the following: Dr. N. L. Rainey, chairman; Dr. J. L. Kleinhessel, Dr. O. C. McCandless, Dr. N. C. Nash, Dr. Charles Rombold, Dr. George Gsell, Dr. Vincent L. Scott, Dr. C. C. Tucker, Dr. Wirt Warren and Dr. J. E. Wolfe.

The Wichita Chamber of Commerce and the city officials are lending fine support to make the meeting and the Hall of Health outstanding events of 1938.

### NEW APPOINTMENT

The Kansas State Board of Administration has recently announced the appointment of Dr. Lyle S. Powell, Lawrence, as eye, ear, nose and throat consultant for the Kansas School for the Blind at Olathe.

### DR. WILHELM DRESSLER

In all probability the Shawnee County Medical Society will have as its guest speaker in February or March Dr. Wilhelm Dressler, one of the leading cardiologists of Vienna. He visited the United States and Canada in 1935 and was invited to lecture before various Academies of Medicine and Hospital groups.

Dr. Dressler will offer several short courses during his visit in Topeka, providing there is enough interest manifested for him to give such courses. A course is limited to a maximum of five men, and if a larger number of men are interested more than one group will be organized. He will offer a course in Clinical Cardiology, of ten hours, an elementary course in Electrocardiography of fifteen hours, an advanced course in Electrocardiography of ten hours. The fee for these courses is a flat rate of \$15.00 an hour, pro-rated between the men who take it; thus if three men participate each pays \$5.00, or if five men participate each pays \$3.00. If any of the men over the state are interested in this course the Shawnee County Society would be glad to have them indicate their interest by dropping a card to Dr. Charles W. Tidd, Chairman of the Postgraduate Committee, P. O. Box 829, Topeka.

### STATE BOARD OF HEALTH

The regular meeting of the Kansas State Board of Health was held in Topeka on December 16 for discussion of routine business.

Members present were:

Dr. Geo. I. Thacher, Waterville, President; Dr. H. L. Aldrich, Caney; Dr. W. C. Lathrop, Norton; Dr. J. L. Lattimore, Topeka; Dr. R. T. Nichols, Hiawatha; Dr. Alfred O'Donnell, Ellsworth; Dr. Albert Rettenmaier, Kansas City; Dr. J. W. Spearing, Cimarron; and Mr. A. B. Mitchell, Lawrence.

### JOINT MEETING

The Douglas County Medical Society held a joint meeting in Lawrence on January 4 with the registered pharmacists of the city and the University of Kansas School of Pharmacy. The entire staff of the pharmacy school was present and every drug store was represented by at least one registered pharmacist and some by more than one.

The program was as follows:

Cooperation between State Medical and Pharmacy Boards  
Walt Varnum, Secretary Board of Pharmacy  
Educational requirements of Pharmacist  
Dean L. D. Havenhill, School of Pharmacy  
Professional relations between physician and pharmacist  
Jay, Sutton, Registered Pharmacist.

### PRISON PHYSICIAN

Dr. Chas. E. Vestle announced on January 3 that he had resigned his position as prison physician at Lansing.

Dr. Robert Moore Lansing, consultant for the prison, has agreed to handle all of the work temporarily until a new resident physician can be appointed.

The swaddled infant pictured at right is one of the famous works in terra cotta exquisitely modeled by the fifteenth century Italian sculptor, Andrea della Robbia. In that day infants were bandaged from birth to preserve the symmetry of their bodies, but still the gibbous spine and distorted limbs of severe rickets often made their appearance.



*A bambino from the Foundling Hospital, Florence, Italy,—A. della Robbia*

Glisson, writing in 1671, described an ingenious use of swaddling bands — “first crossing the Brest and coming under the Armpits, then about the Head and under the Chin and then receiving the hands by two handles, so that it is a pleasure to see the Child hanging pendulous in the Air . . . This kind of Exercise . . . helpeth to restore the crooked Bones. . . .”

## STRAPPED FOR RICKETS

SWADDLING was practised down through the centuries, from Biblical times to Glisson's day, in the vain hope that it would prevent the deformities of rickets. Even in sunny Italy swaddling was a prevailing custom, recommended by that early pediatrician, Soranus of Ephesus, who discoursed on “Why the Majority of Roman Children are Distorted.”

“This is observed to happen more in the neighborhood of Rome than in other places,” he wrote. “If no one oversees the infant's movements, his limbs do in the generality of cases become twisted. . . .

Hence, when he first begins to sit he must be propped by swathings of bandages. . . .” Hundreds of years later swaddling was still prevalent in Italy, as attested by the sculptures of the della Robbias and their contemporaries. For in-

fants who were strong Glisson suggested placing “Leaden Shooes” on their feet and suspending them with swaddling bands in mid-air.

How amazed the ancients would have been to know that bones can be helped to grow straight simply by internal administration of a few drops of Oleum Percomorphum. What to them would have been a miracle has become a commonplace of science. Because it can be administered in drop dosage, Oleum Percomorphum is especially suitable for young

and premature infants, who are most susceptible to rickets. Its vitamins A and D derived from natural sources, this product has 100 times the potency of cod liver oil.\* Important also to your patients, Oleum Percomorphum is an economical antiricketic.

Oleum Percomorphum offers not less than 60,000 U.S.P. vitamin A units and 8,500 U.S.P. vitamin D units per gram. Supplied in 10 and 50 c.c. bottles, also in boxes of 25 and 100 ten-drop soluble gelatin capsules containing not less than 13,300 vitamin A units and 1,850 vitamin D units (equal to more than 5 teaspoonfuls of cod liver oil\*).

\*U.S.P. Minimum Standard

**MEAD JOHNSON & COMPANY, Evansville, Indiana, U. S. A.**

*Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons.*



## POSTGRADUATE COURSES

The Kansas State Board of Health announced recently the results of its third postgraduate course in obstetrics and pediatrics, sponsored in cooperation with the Society. Being a part of the Social Security program, funds for the course were allocated through the Children's Bureau.

The course covered nineteen counties in the northeast section of the state, the meetings being held in the following five cities on the same day of the week for four successive weeks: Topeka, Manhattan, Marysville, Hiawatha and Atchison.

The speakers were Dr. L. A. Calkins and Dr. Frank C. Neff, professors of obstetrics and pediatrics respectively in the University of Kansas School of Medicine, Kansas City, Kansas, and the following subjects were discussed:

## OBSTETRICS

## First week

1. Ectopic Pregnancy.
2. Abortions.

## Second week

3. Prolonged Labor.
4. Complicated Labor.

## Third week

5. I haven't been well since Mary was born.
6. Eclampsia.

## Fourth week

7. Endocrinology in Woman.
8. Pregnancy in Relation to Pelvic Tumors.

## PEDIATRICS

1. Treatment of Emergencies in Newly Born Period.
2. (a) So-called Colic of Infancy.  
(b) Exudative Tendency of Infancy Intertrigo.  
Eczema (prevention-treatment).
3. Modern Methods of Treatment.  
(a) Constipation.  
(b) Non-Inflammatory Diarrhea.  
(c) Bacillary Dysentery.
4. Program for Immunization.  
(a) Active,  
Smallpox, Diphtheria, Pertussis, Tetanus, Scarlet Fever.  
(b) Passive,  
Measles.
5. (a) Treatment of Erysipelas During Infancy.  
(b) Diagnosis of Meningitis.  
(c) Treatment of Meningococcus Meningitis,  
Serum, Antitoxin, Sulfanilimide.
6. (a) Diagnosis of Obscure Causes of Fever.  
(b) Persistent "Colds" throughout the Year.
7. (a) Abdominal Syndromes Resembling Appendicitis.  
(b) Urinary Acidification as Treatment of Pyelitis.
8. Nutritional Care of the Child "Who Has Never Gained".

One hundred fifty-one physicians enrolled for the course. Nine of these were from outside the district. Attendance at afternoon sessions averaged sixteen, and for evening sessions seventeen. Registration of physicians in the district represented twenty-two per cent of licensees. In the first course, given in Western Kansas, fifty per cent of licensees, registered; in the second course, given in north-central Kansas, fifty-five per cent of licensees registered.

The Board of Health has recently written the county medical societies in southeast and south central Kansas, advising that a similar course could be held in their areas if desired, and asked their suggestions as to dates, places of meetings, speakers, etc.

## DR. R. H. JAFFE

Dr. Richard Hermann Jaffe, Chicago, professor of pathology at Rush Medical College and the University of Illinois College of Medicine; since 1922 director of laboratories at the Grant Hospital, Chicago; head of the department of pathology and since 1928 director of laboratories at the Cook County Hospital, Chicago; died in Chicago on December 17.

Dr. Jaffe was a speaker at the Fall Clinical Conference of the Kansas City Southwest Clinical Society held in Kansas City, Missouri, in October.

## NEW ADDRESS

All communications to the central office should now be addressed to The Kansas Medical Society, Room 406, Columbian Building, Topeka, Kansas.

## COMMITTEES

A meeting of the Committee on School of Medicine was held in Emporia on December 5. Members present were Dr. F. J. McEwen, Wichita; Dr. Philip W. Morgan, Emporia; Dr. Fred E. Angle, Kansas City; Dr. L. R. McGill, Hoisington; Dr. J. M. Porter, Concordia; Dr. L. B. Spake, Kansas City; and Dr. J. A. Blount, Larned. Dean H. R. Wahl of the University of Kansas School of Medicine was also present. Clarence G. Munns was present as Executive Secretary.

The minutes of the last meeting were approved with one amendment: That the reference to present courses taught should read one and one-half years at Lawrence and two and one-half years at Rosedale, instead of two years at Lawrence and two years at Rosedale.

Further discussion was given to the possibility of providing a complete four year course at Rosedale, and upon a motion by Dr. Angle, seconded by Dr. Morgan and carried, it was decided that recommendations on this point should be tabled.

Reports were made by Dr. Angle and Dr. Wahl concerning possibilities for instituting a diagnostic service at the University of Kansas School of Medicine. Decision was made that Dr. Angle should discuss this proposal with the officers of the Society and the Committee on Medical Economics, and that further report should be made at the next meeting.

Dr. Blount presented a report concerning the survey of medical economics courses and art of medical practice courses taught in other medical schools. Dr. Blount was requested to compile this information in report form and to forward same to Dean Wahl for his consideration. Dean Wahl requested that the committee forward him a list of members of the Society who would be willing to present lectures on this subject at the University of Kansas School of Medicine.

A survey of medical school postgraduate courses was tabled for discussion at the next meeting.

Upon motion by Dr. Morgan, seconded by Dr. Angle and carried, Dr. McGill was asked to confer with the Editorial Board and the Stormont Medical Library Committee concerning possibilities for consolidation of Stormont Medical Library with the University of Kansas School of Medicine Library, and for placing Journal review copies of new books in the latter library.

Upon motion by Dr. Porter, seconded by Dr. Spake and carried, a suggestion was made that the University of Kansas School of Medicine make its library facilities available to all Kansas doctors of medicine either through

## THE TULANE UNIVERSITY OF LOUISIANA

SCHOOL OF MEDICINE  
Department of Graduate Studies

**REVIEW COURSES:** Medicine; Surgery; Gynecology and Obstetrics;  
January 3 through February 12, 1938; February 14 through March 26, 1938  
For program and further information write

1430 Tulane Avenue

Director of Graduate Studies

New Orleans, La.



## NEUROLOGICAL HOSPITAL

Twenty-Seventh and The Paseo  
Kansas City, Missouri

Modern Hospitalization of  
Nervous and Mental Ill-  
nesses, Alcoholism and  
Drug Addiction.

## THE ROBINSON CLINIC

G. WILSE ROBINSON, M.D.

G. WILSE ROBINSON, JR., M.D.

## THE TROWBRIDGE TRAINING SCHOOL

Established 1917

A HOME SCHOOL for NERVOUS and BACKWARD CHILDREN

The Best in the West

Beautiful Buildings and Spacious Grounds. Equipment Unexcelled. Experienced Teachers. Personal Supervision given each Pupil. Resident Physician. Enrollment Limited. Endorsed by Physicians and Educators. Pamphlet upon Request.

1850 Bryant Building

E. HAYDEN TROWBRIDGE, M.D.

Kansas City, Mo.



# Pure refreshment



a loan packet service or in any other way deemed advisable.

Upon motion by Dr. McGill, seconded by Dr. Porter and carried, a recommendation was made that the Editorial Board continue its medical school section, and that Dean Wahl be asked to supply the necessary material therefore. The committee also expressed its appreciation to the Editorial Board for its assistance in supplying exchange periodicals to the University of Kansas School of Medicine Library without cost, and for its courtesy in offering Journal subscriptions to medical students at a cost price.

Discussion followed concerning more extensive medical school exhibits at state meetings of the Society, and Dean Wahl stated he would be glad to assist in any way possible in this connection.

Dean Wahl asked the committee to assist him in securing suggestions from the members of the Society as to how the medical school can be improved, and he also outlined several possibilities for endowment in which he felt the committee might be able to give assistance.

It was agreed that the next meeting of the committee would be held at Emporia during the first part of February.

Adjournment followed.

\* \* \* \*

A meeting of the Committee on Maternal and Child Welfare was held at the Hotel Kansan in Topeka on December 19. Members of the committee present were Dr. Harry J. Davis, Topeka; Dr. J. D. Clark, Wichita; Dr. L. A. Calkins, Kansas City; Dr. B. I. Krehbiel, Topeka; Dr. G. A. Leslie, McDonald. Other members present were Dr. H. L. Chambers, Dr. H. R. Ross, Dr. F. P. Helm and Dr. Lyle Powell. Clarence G. Munns was present as Executive Secretary.

The first item of discussion was a suggestion that the committee investigate and make recommendation concerning further improvement in maternal and infant mortality and morbidity in this state. Decision was made that Dr. Davis should appoint a sub-committee in this committee to make studies and recommendations in this connection. Decision was also made that the sub-committee should consider incorporation of the following resolutions in its proposals:

A Resolution by Dr. Clark, seconded by Dr. Calkins and carried: That the State Board of Health be requested to secure from attending physicians a complete history of the case in instances of neonatal or intra partum fetal and maternal deaths which shall set forth the procedure taken and the reasons therefore, and also that similar histories and explanations shall be obtained in the instance of cesarean section.

A Resolution by Dr. Calkins, seconded by Dr. Clark and carried: That the record of the New Jersey State Medical Association be brought to the attention of the members of the Society, and that it be suggested to the members of the Society that the rules and regulations wherein New Jersey has been able within the past five years to reduce its maternal mortality from 5.9 per cent to 3.7 per cent should be strongly recommended to every hospital in the state wherein obstetrical cases are accepted, and that it also be recommended that the State Board of Health consider adoption of a similar set of rules and regulations for such hospitals.

Dr. Lyle Powell, Chairman of the Committee on Conservation of Eyesight presented a report pertaining to the findings of his committee on the subject of prevention of ophthalmia neonatorum. Upon motion by Dr. Clark, seconded by Dr. Leslie and carried, the Committee on Conservation of Eyesight was requested to present its finding and

recommendations on this subject to the Kansas State Board of Health and to the members of the Society.

Mrs. Marion Post, Representative of the American Birth Control League, Inc., presented a report of the program of her organization, and requested the assistance of the Society in the conduct of a program of this kind in Kansas. Upon motion by Dr. Calkins, seconded by Dr. Clark and carried, decision was made that the League should be asked to present further information before any action is taken by this committee, and that a sub-committee should be appointed by Dr. Davis to study this information.

Dr. Ross gave a report concerning the three maternal and infant postgraduate programs held to date in the state, and requested the advice of this committee in the conducting of future programs of this kind. Decision was made that Dr. Davis should appoint a sub-committee to confer with Dr. Ross on this subject.

Discussion of other maternal and infant welfare programs of the State Board of Health was tabled until the next meeting of the committee.

A discussion of immunization, preventive medicine and maternal and infant lay educational programs was tabled until the next meeting of the committee. Upon motion by Dr. Calkins, seconded by Dr. Krehbiel and carried, Dr. Chambers and Dr. Krehbiel were asked to make a study of present quarantine regulations in Kansas, and to make recommendations to this committee concerning needed corrections therein, and ways and means for better enforcement.

Discussion concerning conferences with the Kansas State Teacher's Association and the Kansas State Board of Health on public school health problems was tabled until the next meeting of the committee.

A program wherein the committee will assist the Editorial Board in publishing additional articles on maternal and child welfare was tabled until the next meeting.

Adjournment followed.

\* \* \* \*

A meeting of the Committee on Control of Tuberculosis was held in Topeka on January 9, and a meeting of the Committee on Conservation of Eyesight was held in Lawrence on the same date. Minutes of these meetings will be published in an early issue of The Journal.

The following bulletins have recently been issued by the Committee on Conservation of Eyesight and the Committee on Control of Cancer respectively:

TO: Secretaries—County Medical Societies

Official Representatives—All Other Counties.

The Committee on Conservation of Eyesight desires to acquaint you with its contemplated program for this year and also to secure your suggestions and assistance thereon:

1. Close relations have been established with the Kansas Association for the Blind and the Kansas Society for the Prevention of Blindness. Mr. Lawrence Q. Lewis, Secretary of these organizations, has been invited to attend all meetings of this committee and several joint endeavors are being planned.

2. The committee has assisted in the drafting of the procedure for medical examination of blind assistance applicants under the Social Security Act and it hopes to continue serving in an advisory relation in this capacity. It hopes also to serve in a similar way in the preparation and operation of plans for medical and surgical treatment of blind persons which is also included within the Social Security Act.

3. A study is being made of the medical case records available through the Blind Assistance Division of the

# DIABETICS



## LIVE LONGER

*Today*

**T**HE LIFE SPAN of the diabetic has been lengthened considerably following the discovery of Insulin and the growing knowledge of its use. There is, however, a definite responsibility on the part of the physician to educate the many new diabetics in the importance of proper diet and proper use of Insulin preparations.

The apparent increase in diabetes in recent years has been attributed to the modern manner of living, increased sugar consumption, overeating and lack of muscular exercise. With proper management the great majority of patients can be kept well-nourished, sugar-free, and at work.

**Insulin Squibb** is an aqueous solution of the active anti-diabetic principle obtained from pancreas.

It is accurately assayed, uniformly potent, carefully purified, highly stable and remarkably free of pigmentary impurities and proteinous reaction-producing substances.

Insulin Squibb of the usual strengths is supplied in 5-cc. and 10-cc. vials.

**Protamine Zinc Insulin, Squibb** complies with the rigid specifications of the Insulin Committee, University of Toronto, under whose control it is manufactured and supplied. It is available in 10-cc. vials. When this preparation is brought into uniform suspension, each cc. contains 40 units of Insulin together with protamine and approximately 0.08 mg. of zinc.



Kansas State Board of Social Welfare. This represents the first available collection of information of this kind and it is thought that much information for prevention of blindness can be obtained therefrom.

4. The committee plans to issue to the county medical societies at sometime in the future a suggested program for reduction of blindness in Kansas.

5. Since it is known that a considerable number of physicians use remedies other than silver nitrate for prophylaxis of ophthalmia neonatorum, a study is being made of the scientific efficiency of all known preparations for this purpose. This is being done with a view toward recommending a change in the present Kansas law, which requires silver nitrate, in the event that result is indicated.

6. Study is also being made of the Kansas driver's license law in the interest of suggesting certain improvements which might be made therein in eyesight requirements.

7. Through an invitation received from the Kansas State Board of Administration, a survey is to be made of present and needed scientific facilities of the Kansas School for the blind.

8. Cooperation is to be extended to other groups in the furtherance of sight-saving classes in public schools.

9. Plans are being made to provide an extensive lay educational program on the subject of conservation of eyesight.

The committee feels that there are many opportunities for public benefit in this field and it would thus greatly appreciate your calling this program to the attention of your members in order that their suggestions may be received concerning these and any other projects which it should attempt to handle.

Very truly yours,

#### COMMITTEE ON CONSERVATION OF EYESIGHT

Lyle S. Powell, M.D., Chairman

\* \* \* \*

TO: All Secretaries—County Medical Societies  
Official Representatives—All Other Counties.

The Committee on Control of Cancer has asked that I send you the following information:

1. That the following statement of policy shall govern all activities of this committee pertaining to lay education:

a. That every lay educational meeting on the subject of cancer assisted or conducted by this committee shall be under direct sponsorship or supervision by the county medical society in that county.

b. That if a county medical society desires to use or select its own speakers, it shall be given that opportunity, and the committee will assist in any way desired in providing talk outlines, pamphlets, movies, et cetera.

c. That in the event a county medical society desires for this committee to furnish speakers, physicians shall be selected who live in a different area than that in which the talks are to be given.

d. That the committee, in the interest of providing continuity in lay cancer education, requests the privilege of reading all lay talks on this subject in advance of their being given.

e. That the committee recommends and urges that all county medical societies cooperate with all lay agencies and particularly the Kansas Women's Field Army in the dissemination of information on this subject.

2. That the committee will prepare within the near

future and make available through the central office, lay and professional packets of information on cancer. The professional packets will consist of pamphlets and talk outlines to aid members in preparing lay talks on this subject, and the lay packets will consist of selected pamphlets on the same subject. The professional packets will be available for loan to members and the lay packets will be loaned to lay groups and lay individuals approved by the county medical societies.

3. The committee hopes to publish within the next six months a brochure for professional use containing suggestions for the diagnosis and treatment of cancer.

4. An attempt is being made to secure approval of funds for a third annual cancer control program. If plans in this direction are successful, cancer postgraduate programs will be presented in all areas of the state.

5. The committee desires to suggest that each county medical society arranges to hold at least one or two programs on cancer during the current year. It is believed that through this medium much encouragement can be given to members to accomplish complete physical examinations and that thereby much assistance can be attained in the early recognition of this disease.

6. The committee is particularly interested in learning the names, addresses, and types of practice of every cultist or quack in the state who is treating cancer by medicinal or surgical methods. Many of these tragedies can be stopped through application of the new Injunction Law. If you will be good enough to advise the central office concerning any practitioners of this kind in your vicinity, your assistance will be greatly appreciated.

7. The committee recommends strongly that the county medical societies make every effort to present lectures on cancer before women's clubs and other lay groups and that they engage in all other lay educational activities possible. The committee also recommends that the county medical societies attempt to cooperate with the Kansas Women's Field Army for Control of Cancer in all ways possible.

8. If you think of any other activities in which this committee should be engaged or any ways in which its work can be made more efficient, your suggestions will be greatly appreciated.

Very truly yours,

#### COMMITTEE ON CONTROL OF CANCER

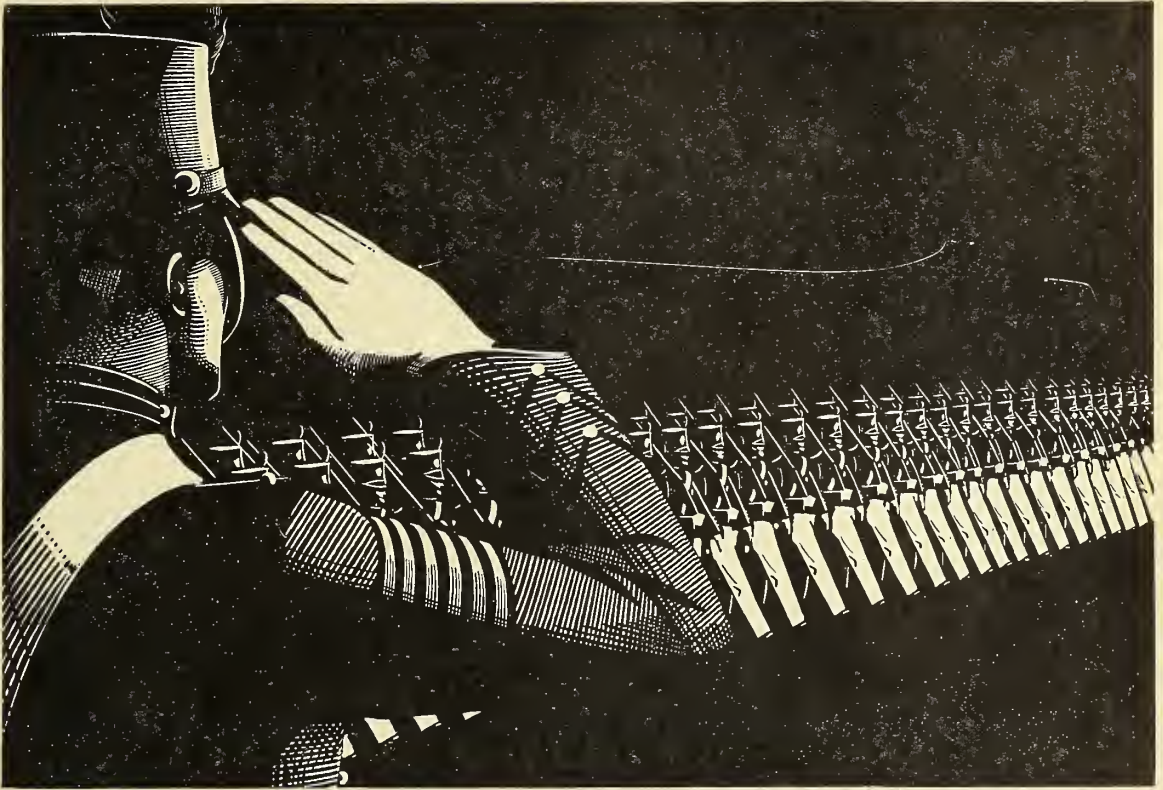
C. C. Nesselrode, M.D., Chairman.

#### ANNOUNCEMENTS

The Second Annual Clinical Conference of the Midwestern Radiologists will be held in the Muehlbach Hotel, Kansas City, Missouri, February 11, 12, 1938. The Medical Profession of the Midwest are cordially invited to attend this meeting—there will not be any registration fee.

Weekly clinical pathologic conferences are held every Friday, at 9 A.M., at St. Francis Hospital, Wichita, Kansas. Post-mortem and surgical specimens are presented and an attempt is made to correlate the relationship of the clinical symptoms to the pathological findings. The conferences are open to any physician.

The officers of the American Public Health Association announce that the 67th Annual Meeting will be held in Kansas City, Mo., October 25-28, 1938. Dr. Edwin Henry Schorer, Director of the Kansas City Health Department, has been appointed chairman of the local committee. He



# ★ DISCIPLINE ★

"Discipline is the development of the faculties by instruction and exercise." When functions such as habit time of bowel movement are neglected through lack of discipline or intelligence, they require careful training to restore them to a normal state. Petrolagar has proved to be an agreeable and effective means of establishing bowel

discipline . . . . Because Petrolagar mixes intimately with the bowel contents, it increases the bulk in the stool to a soft mass which is easily passed . . . . The Five Types of Petrolagar provide the doctor with a variation of treatment to suit the individual patient . . . . Petrolagar Laboratories, Inc., 8134 McCormick Boulevard, Chicago, Ill.



Petrolagar — Liquid petrolatum 65 cc. emulsified with 0.4 Gm. agar in a menstruum to make 100 cc.



# Petrolagar



will be assisted by a large group of city and state officials and community leaders. A long list of affiliated organizations meet habitually with the American Public Health Association. They include: The American Association of School Physicians; The Association of Women in Public Health; The Conference of State Laboratory Directors; The Conference of State Sanitary Engineers; The American Association of State Registration Executives; Delta Omega; and The International Society of Medical Health Officers. The attendance at the 67th Annual Meeting will exceed 3,000 professional public health workers from every state in the Union, Canada, Cuba and Mexico.

### AMERICAN MEDICAL GOLFING ASSOCIATION

The American Medical Golfing Association announces a special train for golfers to the next annual meeting in San Francisco, California, June 13 to 17. This trip will include many special features, sightseeing, golfing at famous courses at New Orleans, Louisiana; Houston, Galveston, and San Antonio, Texas; Del Monte, California; Portland, Oregon; and Banff, Alberta. For full details of the extensive program, rates from all points etc., address Dr. W. P. Conaway, President, American Medical Golfing Association, 1723 Pacific Avenue, Atlantic City, New Jersey.

### MEMBERS

Dr. Conrad M. Barnes, Seneca, has announced plans for the opening of a small hospital.

Dr. George Armitage, Kinsley, has been awarded a fellowship, and plans to begin special work soon at Northwestern University School of Medicine in Chicago.

Dr. Charles Pokorny, Hoisington, and Dr. N. W. Robison, Bison, have recently opened an office in Otis. Dr. Pokorny will be in Otis on Mondays, Wednesdays and Fridays; and Dr. Robison on Tuesdays, Thursdays, and Saturdays.

Dr. Norman Reider, Topeka, spoke on "Headaches", at the Six-County Medical Society meeting in Norfolk, Nebraska, on December 9.

Dr. L. W. Zimmerman, Liberal, has been named Seward County Health Officer to succeed Dr. Vance F. Morgan, who has taken a position with the Oklahoma State Department of Health in Oklahoma City.

The Missouri-Kansas Neuro-Psychiatric Society, of which Dr. Ralph M. Fellows of Osawatomie is secretary, held a meeting at the Menninger Clinic in Topeka on December 15. Kansas speakers and their subjects were: Dr. Joseph Pessin, Topeka, "Blood Pressure Observations in Insulin Therapy"; Dr. Eugene Eisner, Topeka, "Motion Pictures of Metrazol Treatment"; and Dr. Marshall Hyde, Osawatomie, "Experience in Continuous Treatment Using Insulin and Metrazol".

### COUNTY SOCIETIES

At a meeting of the Allen County Medical Society held in Iola on December 21, the following officers were elected for 1938: Dr. H. M. Webb, Humboldt, president; Dr. O. R. Christian, Iola, vice-president; Dr. O. L. Cox, Iola, secretary; Dr. F. L. B. Leavell, Iola, treasurer; Dr. A. R. Chambers, Iola, censor (three year term); Dr. H. L. Hendricks, Iola, delegate; and Dr. L. F. Schmaus, Iola, alternate.

The Barton County Medical Society and the wives of its members held an annual dinner meeting, in Hoisington on December 14. At the election of officers following the dinner, the present officers were chosen to serve another year. These are: Dr. T. J. Brown, Hoisington, president; Dr. L. R. McGill, Hoisington, vice-president; and Dr. Don Kendall, Great Bend, secretary-treasurer.

The Brown county auxiliary members were dinner guests of the Brown County Medical Society at a meeting held in Hiawatha on December 3. Principal order of business was election of officers as follows: Dr. Edward K. Lawrence, Hiawatha, president; Dr. J. R. Heryford, Fairview, vice-president; Dr. Paul E. Conrad, Hiawatha, secretary; and Dr. R. T. Nichols, Hiawatha, treasurer.

The annual banquet and election of officers of the Bourbon County Medical Society was held in Fort Scott on December 20. Dr. W. T. Wilkening, Fort Scott, was elected president; Dr. J. J. Cavanaugh, Fort Scott, vice-president; Dr. L. L. Cooper, Fort Scott, secretary-treasurer; Dr. R. O. Crume, Fort Scott, delegate; Dr. John Hunter, Fort Scott, alternate; and Dr. J. R. Newman, Fort Scott, Dr. J. R. Prichard, Fort Scott and Dr. R. Y. Strohm, Fort Scott, board of censors.

A meeting of the Crawford County Medical Society was held in Pittsburg on December 16. Officers for the coming year were chosen as follows: Dr. E. J. Schulte, Girard, president; Dr. C. S. Newman, Pittsburg, vice-president; and Dr. W. G. Rinehart, Pittsburg, secretary-treasurer. The program also included the showing of several motion picture films by Dr. C. S. Newman.

Edwards County Medical Society met in Kinsley on December 23 for election of officers.

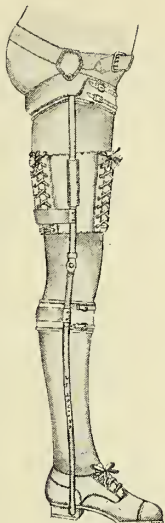
Dr. J. T. Naramore, Parsons, and Dr. E. C. Duncan, Fredonia, were speakers at a meeting of the Labette County Medical Society held in Parsons on December 22. Dr. Naramore spoke on "Mental Diseases", and Dr. Duncan discussed "Medical Organization".

The Pratt County Medical Society had a dinner meeting December 22 in Pratt. The entire membership, which includes every doctor of medicine in the county, and their wives were present.

Butler-Greenwood County Medical Society met December 10 at El Dorado. Dr. F. L. Feierabend, of Kansas City, Missouri, discussed "Skeletal Traction as a Therapeutic Measure". Election of officers was held as follows: Dr. J. H. Johnson, El Dorado, president; Dr. R. M. Brian, El Dorado, vice-president; Dr. W. E. Janes, Eureka, secretary-treasurer; Dr. G. G. Whitley, Douglas, director; Dr. D. O. Haage, Augusta, censor; Dr. A. L. Pettis and Dr. R. B. Earp, El Dorado, delegates; and Dr. D. O. Haage, Augusat, and Dr. A. P. Cloyes, El Dorado, alternates.

Dr. G. G. Whitley, Douglas, spoke on "The Butler County Plan" at a meeting of the Cowley County Medical Society held in Arkansas City on December 9. Election of officers for 1938 was also held with the following results: Dr. L. P. Ravenscroft, Winfield, president; Dr. W. G. Weston, Arkansas City, vice-president; and Dr. Warren Bernstorff, Winfield, secretary-treasurer.

Members of Douglas County Medical Society met in Lawrence on December 3 for election of officers. Dr. Lyle S. Powell, Lawrence, was chosen as president; Dr. N. P. Sherwood, Lawrence, vice-president; Dr. E. M. Owen, Lawrence, treasurer; and Dr. J. M. Mott, Lawrence, secre-



Individual Care and  
Attention Given to  
Every  
Conceivable Appli-  
ance for the  
Correction of  
Deformities and  
Support of Spine and  
Extremities Follow-  
ing Fracture and  
Tuberculous  
Conditions

Braces of Quality

50 years in Business  
22 years in Kansas  
City

**P. W. HANICKE MFG. CO.**

1013 McGee Street  
KANSAS CITY, MO.

Tel. Victor 4750

## The Mary E. Pogue School

Established 1903

A school for the care and training of children mentally subnormal or who suffer from organic brain diseases.

Gilbert H. Marquardt, M.D., Attending Physician  
William H. Holmes, M.D., Consulting Physician  
Gerard N. Krost, M.D., Pediatrician

**Wheaton, Ill. Phone—Wheaton 66**

40 Geneva Road

## Copper Engraving Company

Artists Engravers  
FOURTH FLOOR, COPPER BLDG.  
Topeka Kansas



Send us your photo for portrait cut.  
Or for other plate needs.



## OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request

**OAKWOOD SANITARIUM**

Tulsa, Oklahoma, Route 6

**NED R. SMITH, M.D.**  
Medical Director

**S. CHARLTON SHEPARD, M.D.** Attending Internist  
Business Manager

**DAISY N. NEESE**  
Superintendent



tary. Dr. J. B. Henry, Lawrence, was re-elected to serve another three year term on the board of censors; and delegates chosen are Dr. H. L. Chambers and Dr. A. S. Anderson both of Lawrence. Following the business meeting, an illustrated talk was given by Dr. M. T. Sudler concerning his recent trip to Scandanavian countries.

The Ford County Medical Society held its annual election of officers in Dodge City on December 10. Dr. C. L. Williams, Dodge City, was elected president; Dr. L. F. Schumacher, Meade, vice-president; Dr. C. M. Alderson, Dodge City, secretary; and Dr. R. D. Russell, Dodge City, treasurer.

The Golden Belt Medical Society held its regular quarterly meeting in Abilene on January 6. The scientific program was as follows: "Thoracic Surgery", Dr. Brian Blades, Associate, Department of Surgery, Washington University School of Medicine, St. Louis, Missouri, with discussion opened by Dr. George Seitz, Salina; "Photography In Medicine", Dr. A. J. Brier, Topeka, with discussion opened by Dr. Raymond Gelvin, Concordia; "The Nervous Break-down", Dr. Robert Knight, Topeka, with discussion opened by Dr. Barrett A. Nelson, Manhattan; and "Thyroid Surgery", Dr. L. S. Nelson, Salina, (a motion picture), with discussion opened by Dr. C. E. Joss, Topeka.

Dr. Robert Moore, Lansing, was elected president; Dr. Richard McKee, Leavenworth, vice-president; and Dr. W. L. Pratt, Leavenworth, secretary-treasurer, at a meeting of the Leavenworth County Medical Society held in Leavenworth on December 13. Another meeting of this society was held in Leavenworth on January 10.

The Meade-Seward County Medical Society is showing a series of lay educational motion pictures. The first, on hernia operations, was shown on January 7 at the Liberal High School, with Dr. A. L. Hilbig, Liberal, in charge of the program. In February, the subject will be appendix operations, in charge of Dr. W. N. Lemmon, and in March a picture on the correction of cross eyes, both by the machine and knife methods, will be shown under the direction of Dr. W. T. Grove.

The following officers were elected at a meeting of the Lyon County Medical Society held in Emporia on December 7. Dr. Harris W. Manning, Emporia, president; Dr. M. T. Capps, Emporia, vice-president; and Dr. C. H. Munger, Emporia, secretary-treasurer.

The Marion County Medical Society held its annual business meeting and election of officers on December 15. The following officers were reelected: Dr. J. B. Nanninga, Goessel, president; Dr. G. J. Goodsheller, Marion, vice-president; Dr. R. R. Melton, Marion, secretary-treasurer; Board of Censors, Dr. G. J. Goodsheller; chairman, Dr. W. M. Tate, Peabody and Dr. A. C. Eitzen, Hillsboro; Dr. R. R. Melton, delegate; and Dr. J. B. Nanninga, alternate. Another meeting of this society was held on January 12, with Dr. D. V. Conwell, and Dr. L. W. Hatton, of the Hertzler Clinic, Halstead, as speakers. Dr. Conwell's subject was "Vertigo", and Dr. Hatton spoke on "Pellagra as a Local Problem in Kansas".

Dr. A. H. Dyck, McPherson, was elected president of the McPherson County Medical Society at a meeting held in McPherson on December 8. Dr. Cora E. Dyck, Moundridge, sister of Dr. Dyck, was elected vice-president; and Dr. A. M. Lohrentz, McPherson, was reelected secretary-treasurer. Delegate and alternate respectively are Dr. William Holwerda, Lindsborg, and Dr. C. R. Lytle, McPherson.

son. Following the election a motion picture on surgical technique was shown.

Mr. K. W. McFarland, Superintendent of Schools, Coffeyville, was the principal speaker at a meeting of the Montgomery County Medical Society held in Coffeyville on December 10. Election of officers was held with the following results: Dr. P. S. Townsend, Coffeyville, president; Dr. C. O. Shepard, Independence, secretary-treasurer; Dr. H. O. Bullock, Independence, vice-president; Dr. W. G. Norman, Cherryvale, vice-president; and Dr. J. G. Hughbanks, Independence, censor for a three year term.

Members of Riley County Medical Society held their annual election of officers in Manhattan on December 8. The following were chosen: Dr. M. W. Husband, Manhattan, president; Dr. R. R. Cave, Manhattan, vice-president; Dr. Kellogg Bascom, Manhattan, secretary-treasurer; and Dr. W. M. Reitzel, Manhattan, censor.

Dr. L. S. Nelson, Salina, retiring president of Saline County Medical Society, was host at a dinner meeting of that society held December 9 in Salina. Election of officers was held as follows: Dr. E. M. Sutton, Salina, president; Dr. Porter Brown, Salina, vice-president; Dr. Maurice Snyder, Salina, secretary; and Dr. O. R. Brittain, Salina, treasurer. The program also included medical motion pictures.

The annual banquet and joint meeting with the auxiliary of the Sedgwick County Medical Society was held in Wichita on December 21. Installation of new officers for 1938 was as follows: Dr. G. B. Morrison, Wichita, president; Dr. F. J. McEwen, Wichita, vice-president; Dr. E. L. Mills, Wichita, secretary; and Dr. H. R. Hodson, Wichita, treasurer. Another meeting of this society was held in Wichita on January 4. The program included the President's Address by Dr. Morrison, and "Endometriosis", by Dr. H. C. Clark, Wichita.

Shawnee County Medical Society met in Topeka on January 3, with the following program: "Differential Diagnosis of Jaundice", Dr. D. C. Wakeman, Topeka, with discussion opened by Dr. W. M. Mills, Topeka, and Dr. J. L. Lattimore, Topeka; "Use of Mecholy in the Treatment of Varicose Conditions", Dr. Leslie Saylor, Topeka, with discussion opened by Dr. M. E. Pusitz, Topeka; and "Convulsions as a New Treatment in Psychiatry" (motion pictures), Dr. Norman Reider, Topeka, with discussion opened by Dr. W. C. Menninger, Topeka.

The program at a dinner meeting of the Southeast Kansas Medical Society held in Chanute on December 7, was as follows: Dr. J. F. Gsell, Wichita, "The Foreign Body Condition of the Eye, Ear, Nose and Throat"; Dr. E. A. Pickens, Wichita, "Resection of the Prostate"; and Dr. E. C. Duncan, Fredonia, "Socialized Medicine".

The members of the Stafford County Medical Society met December 16 in Stafford.

Election of officers for 1938 was the principal order of business at a dinner meeting of the Sumner County Medical Society held in Wellington on December 16.

The Washington County Medical Society met in Washington on December 14. Dentists of the county were guests and the program included a paper on "Focal Infections", by Dr. H. G. Hurtig, Hanover. Election of officers was also held as follows: Dr. Henry Smith, Washington,

When a liquid  
vasoconstrictor  
is indicated—

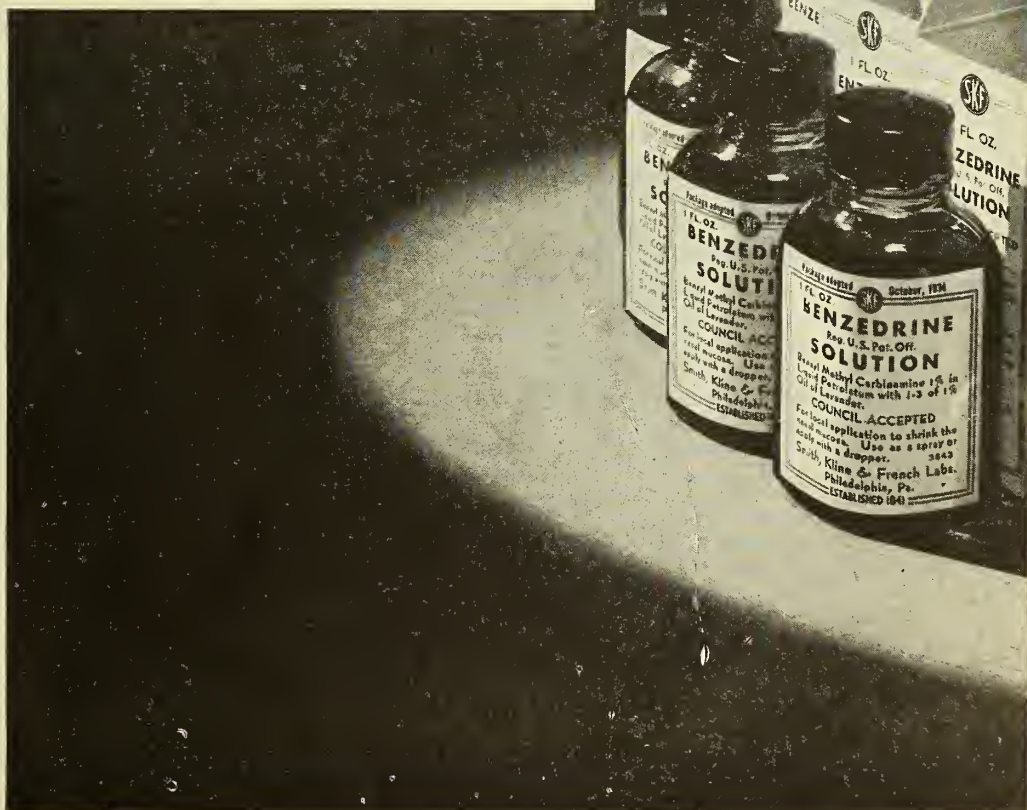
## BENZEDRINE\*

## SOLUTION

For shrinking the nasal  
mucosa in head colds,  
sinusitis and hay fever

\*Benzyl methyl carbinamine, S. K. F., 1 per cent  
in liquid petrolatum with  $\frac{1}{3}$  of 1 per cent oil  
of lavender. 'Benzedrine' is the trade mark  
for S.K.F.'s brand of the substance whose de-  
scriptive name is benzyl methyl corbinamine.

SMITH, KLINE & FRENCH LABORATORIES  
PHILADELPHIA, PA. • ESTABLISHED 1841





president Dr. F. E. Rogers, Linn, vice-president; and Dr. F. H. Rhoades, Hanover, secretary-treasurer.

Dr. C. W. Wilson of Fredonia was voted into membership of the Wilson County Medical Society at a meeting held recently.

A new constitution and by-laws were adopted at a meeting of the Wyandotte County Medical Society on December 7 in Kansas City. Dr. Fred Angle, Kansas City, discussed "Medicine In Russia"; and Dr. Clarence Gripkey, Kansas City, presented a paper on "Technique in Thyroidectomy".

Douglas County Medical Society announces two new honorary members—Dr. E. R. Keith, Lawrence, who has served the community since 1892, and Dr. James Naismith, Lawrence, who has practiced in Douglas County since 1898.

Members of Harper County Medical Society met on January 4 for election of officers as follows: Dr. C. E. Ressler, Anthony, president; and Dr. P. G. Miller, Anthony, secretary.

### DEATH NOTICES

Dr. Charles H. Kaiser, 65 years of age, died at his home in Hillsboro on January 1. Dr. Kaiser was graduated from the Kansas Medical College, Topeka, 1900, and had practiced in Marion County for thirty-five years. He was a member of Marion County Medical Society.

Dr. Emanuel N. Martin, 63 years of age, of Clay Center, died in Halstead on December 16. Dr. Martin graduated from the University Medical College of Kansas City in 1900, and had practiced in Clay Center for many years. He was a past president and secretary of the Clay County Medical Society, of which he was a member at the time of his death. He was also the Clay County Health Officer, and a member of the Golden Belt Medical Society.

Dr. Robert Allen McCurdy, 29 years of age, of El Dorado, died in Temple University Hospital at Philadelphia, Pennsylvania, on December 15. Dr. McCurdy was born at St. Louis, Missouri, on December 29, 1907. He received his degree in medicine from the University of Kansas School of Medicine in 1933. He then went to Cleveland, Ohio, where he was resident physician at the Cleveland City Hospital for two years and at Lakeside Hospital for one year. Dr. McCurdy moved to ElDorado in August, 1936, where he specialized in obstetrics and gynecology. Illness, however, limited his practice to thirteen months. At the time of his death, Dr. McCurdy was a member of Butler-Greenwood County Medical Society.

Dr. Virgil Morrison, 55 years of age, of Atchison, died in Los Angeles, California, on December 17. Dr. Morrison graduated from Ensworth Medical College of St. Joseph, Missouri, in 1905, and commenced practice in Iatan, Missouri. He later moved to Oklahoma City, and settled permanently in Atchison in 1910. Dr. Morrison was a member of Atchison County Medical Society.

Dr. Lynn H. Parker, 51 years of age, of Parsons, was killed in an automobile accident on January 2. He attended the Southwest School of Medicine and Hospital in Kansas City, from which he received his degree in 1914. Dr. Parker had practiced in Parsons for a number of years and was a member of Labette County Medical Society.

## AUXILIARY

### PRESIDENT'S MESSAGE

Dear Auxiliary Members:

It is always a joy to meet members of the auxiliary from all over our United States and this I did at our national board meeting in Chicago. The meeting was held at the Palmer House Hotel on November the nineteenth.

Mrs. Keck, our national president is a most charming and capable person, one who inspires her listeners to bigger and better things.

Nine officers, five directors, five committee chairmen and seventeen state presidents were present. This was one of the largest meetings, we really are a growing organization. Mrs. Keck in her report told of her visits to the different states. She intends before her term of office expires to visit every organized state, thirty-nine in all. She could give me no definite time as to when she will visit Kansas, but I will let you all know in time to make your plans. It will be well worth your time and effort to hear her.

The finance chairman told us that she had received about two hundred dollars during the summer delinquent dues and asked for our cooperation by reminding the county treasurers to get them in on time. Let's start now.

After the Hygeia report was read it was suggested that each state have a Hygeia day. "Every member a subscriber and reader," was the Hygeia slogan. Are we living up to that? Every member a national news letter subscriber was also mentioned. At least each county president should get this letter. It is both helpful and inspirational.

The studying of the hand book by our officers and chairmen was stressed. If you do not already have one I will be glad to see that one is sent to you.

It was agreed that educating the public by means of exhibits was a very valuable project. You will hear more about this from our chairman.

The archives are being bound at our national headquarters in Chicago. This is a huge undertaking and a much needed one. More board meetings were thought to be conducive to closer cooperation.

The reports of the state presidents present were very interesting, in fact it was nearly five o'clock before we adjourned. Time had passed so rapidly that from ten in the morning until five had seemed but a few hours.

We adjourned with the thought in our minds of doing our part to make this a better place in which to practice scientific medicine.

Mrs. R. W. Urie.

The Sedgwick County Auxiliary held their December business meeting and Christmas luncheon December 13 at the Innis Tea Room, Wichita. Mrs. Wilfred Cox presided over the business session and luncheon. Mrs. E. J. Nodurft was in charge of luncheon arrangements and decorations. Mr. Ralph Hinman of the Chamber of Commerce was the guest speaker. His subject was, "Consumer's Education" and detailed the various quackeries practiced on housewives by peddlers.

While editorial policy denies the publishing of purely social items such as births, marriages, trips and general parties, this section welcomes the notice of the entertainment of civic clubs by auxiliaries or members of auxiliaries, since it gives evidence of auxiliary participation in lay activities. The latter is deemed one of the most important functions of auxiliary.

The annual meeting of the board of directors was held at the home of Mrs. R. W. Urie, president, in Parsons, December 2. Routine business was transacted. Discussions served to clarify several points.

The board was entertained at luncheon by the Labette County Auxiliary at which the guest speaker discussed legislation in Kansas, pertaining to medicine.

The Kansas State Board of Health reports that there were 16,646 cases of influenza reported in 1937, and the deaths from that disease during the first eleven months of the year totaled 658.

#### FAIRMOUNT MATERNITY HOSPITAL

Offers a modern fireproof hospital for the seclusion and care of the unmarried mother. Adoptions arranged if desired.

FRED B. KYGER, M.D. Obstetrical Director  
1414 East 27th Street, Kansas City, Mo.

# 16,000

## ethical



Since 1902

## practitioners

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

# \$1,500,000 Assets

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited with the State of Nebraska**

for the protection of our members residing in every State in the U.S.A.

**PHYSICIANS CASUALTY ASSOCIATION**

**PHYSICIANS HEALTH ASSOCIATION**

400 First National Bank Building  
OMAHA - - - NEBRASKA



Since 1912

## COOK COUNTY GRADUATE SCHOOL OF MEDICINE

(In Affiliation with Cook County Hospital)  
Incorporated not for profit.

### ANNOUNCES CONTINUOUS COURSES

**MEDICINE**—Informal Course; Intensive Personal Courses; Special Courses.

**SURGERY**—General Courses, one, two, three and six months; Two Weeks' Intensive Course in Surgical Technic with practice on living tissue; Clinical Course; Special Courses.

**GYNECOLOGY AND OBSTETRICS**—Diagnostic Courses; Clinical Courses; Special Courses.

**FRACTURES AND TRAUMATIC SURGERY**—Informal Practice Course; Ten-day Intensive Course starting Feb. 14, 1938.

**OTOLARYNGOLOGY**—Two Weeks' Intensive Course starting April 4, 1938.

**OPHTHALMOLOGY**—Two Weeks' Intensive Course starting April 18, 1938; Personal Course in Refraction.

**UROLOGY**—General Course, two months; Intensive Course, two weeks; Special Courses.

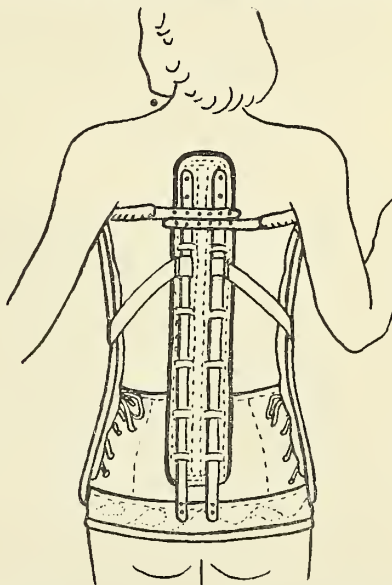
**CYSTOSCOPY**—Ten-day Practical Course.

General, Intensive, and Special Courses in all Branches of Medicine and Surgery.

**TEACHING FACULTY—ATTENDING STAFF OF COOK COUNTY HOSPITAL**

Address: Registrar, 427 South Honore Street, Chicago, Illinois.

## A COMPLETE SERVICE



We make all types of braces, splints, belts, elastic hose, crutches, arch supports and special apparatus.

**Kansas City Brace & Splint Co.**  
847 Minnesota Avenue Kansas City, Kansas





**When You Prescribe  
a brace  
Think of Us!**

All types of orthopaedic  
appliances made by skilled  
workmen

—  
**ISLE SERVICE  
SATISFIES**  
—

**THE W. E. ISLE  
COMPANY**

1121 Grand Ave.  
Kansas City, Mo.

## **JOHNSON HOSPITAL CHANUTE, KANSAS**

Complete Clinical  
Laboratory  
Radium  
X-Ray

The new Wils-edge mounting is meeting with instant approval. If you are not familiar with this sensational new method of rimless mounting, please get in touch with us at once.

### **QUINTON-DUFFENS OPTICAL COMPANY**

*Your Local Independent Wholesaler*

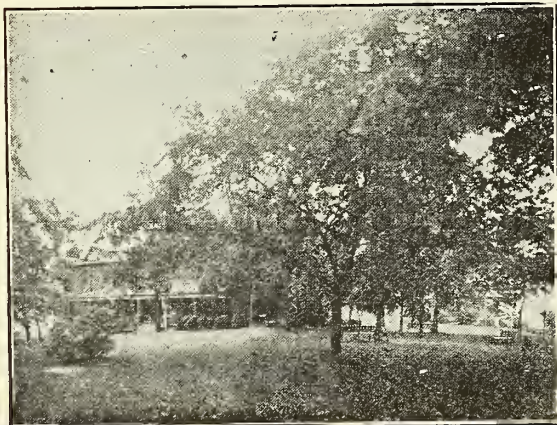
**TOPEKA**

**HUTCHINSON**

**SALINA**

# **Grandview Sanitarium**

**KANSAS CITY, KANSAS, (26th St. and Ridge Ave.)**



A High Grade Sanitarium and Hospital of  
super accommodations for the care of:

**Nervous Diseases**

**Mild Psychoses**

**The Drug Habit**

**and Inebriety.**

Situated on a 20-acre tract adjoining City  
Park of 100 acres. Room with private bath  
can be provided.

The City Park line of the Metropolitan Rail-  
way passes within one block of the Sani-  
tarium. Management strictly ethical.

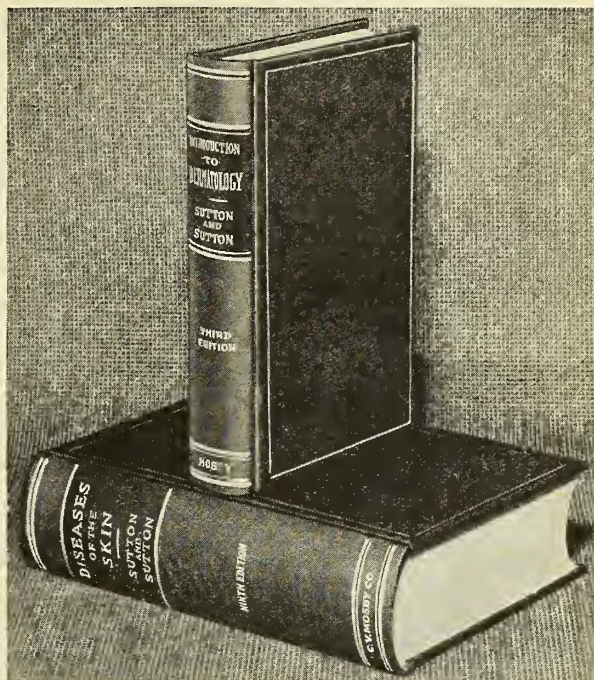
Telephone: Drexel 0019

**SEND FOR BOOKLET**

**E. F. DeVILBISS, M.D., Supt.**  
**OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.**

## Dependable Help for Diagnosing and Treating Skin Diseases

By R. L. SUTTON, Professor  
of Dermatology, University of  
Kansas, School of Medicine, and  
R. L. SUTTON, JR., Instructor  
in Dermatology, University of  
Kansas, School of Medicine.



### The COMPLETE Reference DISEASES of the SKIN

If you want a complete reference book—a textbook and an atlas combined—"Diseases of the Skin," with its 1433 pages and 1310 illustrations, will be the solution to your needs. Since 1917 this book has been a leader. The present NINTH EDITION is better than ever. It will help you to correctly diagnose your case—and tell you how to treat it. The symptomatology, diagnosis, and treatment of the various disorders of the skin are presented clearly and simply. Particular emphasis has been placed on pathology and treatment. The majority of the therapeutic measures recommended are those which the author has found useful and practicable in his own private and dispensary practice.

**DISEASES OF THE SKIN—9th Edition.**  
1433 pages, 1310 illustrations. Price, \$12.50.

### The HANDY Reference INTRODUCTION TO DERMATOLOGY

If you want a smaller book—less extensive, but equally as accurate, "Introduction to Dermatology" will satisfy. Completely rewritten and improved by the addition of 45 new illustrations. Much new information regarding therapy has been introduced into this new Third Edition. The section on syphilis has been enlarged.

This book, based on the larger text, combines judiciously the viewpoints of the senior author and the newer points of view of the junior author, retaining, however, the original latticework of fundamental facts which contributed so much to the value and popularity of the parent volume, and omitting much descriptive and statistical matter which is of interest to only the research worker and the specialist.

**INTRODUCTION TO DERMATOLOGY**  
—3rd Edition. 666 pages, 229 illustrations.  
Price, \$5.00.

#### THE C. V. MOSBY, COMPANY

3525 Pine Blvd., St. Louis, Mo.

KMJ-11-37

Gentlemen: Send me the Sutton book checked with (X), charging my account.

☐ DISEASES OF THE SKIN—\$12.50

☐ INTRODUCTION TO DERMATOLOGY—\$5.00

Dr. \_\_\_\_\_ Address \_\_\_\_\_



Alcoholism  
Senility  
Drug Addiction

## A Modern Ethical Hospital at Louisville

Founded 1904

Mental  
and  
Nervous Diseases

### Beautiful And Spacious Grounds Afford Outdoor Relaxation

Our **ALCOHOLIC** treatment destroys the Craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Whiskey withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

**MENTAL** patients have every comfort that their home affords.

Select cases of **SENILITY** accepted.

The **DRUG** treatment is one of Gradual Reduction; it relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

**NERVOUS** patients are accepted by us for observation and diagnosis, as well as treatment.

Physiotherapy—Clinical Laboratory—X-Ray.

Consulting Physicians and Surgeons.

Request  
Rates and Folder

## THE STOKES HOSPITAL

Telephone,  
Highland 2101-2102

E. W. STOKES, M.D., Medical Director, 923 Cherokee Road, Louisville, Ky.

## WHEN DEALING WITH CANCER

consider the utility, accessibility and

## LOW-COST OF RADIUM THERAPY

**LEASING PLAN:** Equivalent to radium ownership without CAPITAL investment. You keep possession continuously. We pay insurance and upkeep. 50 milligrams for \$22.50 per month; 100 milligrams \$40.00. Larger amounts in proportion. The initial lease is for a period of one year. New radium. Modern platinum containers.

**RENTAL PLAN:** Any quantity available by special delivery express. Platinum tubes and needles, and plaques, in all dosage range. The basic rate is \$14 for 50 milligrams for 30 hours actual time of application.

**PURCHASE PLAN:** Radium in all forms available for purchase in any quantity at the lowest price in the history of the radium industry.

### THE COMPLETE SERVICE FOR RADIUM USERS

**RADON:** Radon in ALL-GOLD implants at \$2.50 per millicurie.

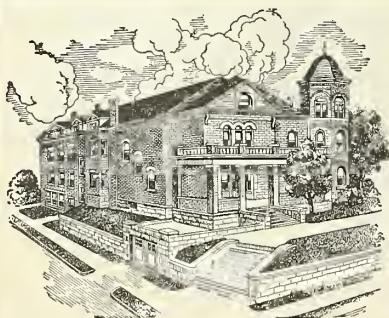
Telephone RANDolph 8855, or write or wire

## RADIUM AND RADON CORPORATION

CHICAGO, ILLINOIS

25 E. Washington St.

Marshall Field Annex Building



## Alcohol.Barbital.Morphine

Addictions Successfully Treated Since 1897  
by the Methods of Dr. B. B. Ralph.

WRITE FOR DESCRIPTIVE BOOKLET

## THE RALPH SANITARIUM

RALPH EMERSON DUNCAN, M. D., Director

Established in 1897

529 Highland Ave.

Telephone Victor 4850

Kansas City, Mo.

# IN FEEDING REGULATION

## *It's the Infant's Response*

### PROPERTIES OF KARO

Uniform composition  
Well tolerated  
Readily digested  
Non-fermentable  
Chemically superior  
Bacteriologically safe  
Non-allergic  
Economical



### COMPOSITION OF KARO

(Dry Basis)

Dextrin.....	50%
Maltose.....	23.2%
Dextrose.....	16%
Sucrose.....	6%
Invert sugar.....	4%
Minerals.....	0.8%



### KARO EQUIVALENTS

1 oz. vol.....	40 grams
	120 cal.
1 oz. wt.....	28 grams
	90 cal.
1 teaspoon....	15 cal.
1 tablespoon...	60 cal.

The final test of the adequacy of a feeding is the response on the part of the infant. It is frequently necessary to give a milk mixture of a considerably higher caloric value than anticipated.

The giving of food of too low a caloric value to meet the infant's needs is usually the chief cause of failure in infant feeding. The energy requirements may be met by Karo added to the type of formula indicated.

*For further information, write*

CORN PRODUCTS SALES COMPANY  
SJ-1 17 Battery Place, New York, N. Y.



★ Infant feeding practice is primarily the concern of the physician, therefore, Karo for infant feeding is advertised to the Medical Profession exclusively.



## PROFESSIONAL PROTECTION



### A DOCTOR SAYS:

"When an insurance company can settle a \$25,000 law suit for \$50,000 that insurance company must know its business and again I say 'Thank you'."

THE

## MEDICAL PROTECTIVE COMPANY

OF FORT WAYNE, INDIANA

WHEATON, ILLINOIS

## Behind MERCUROCHROME

(dibrom-oxymercuri-fluorescein-sodium)



is a background of

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

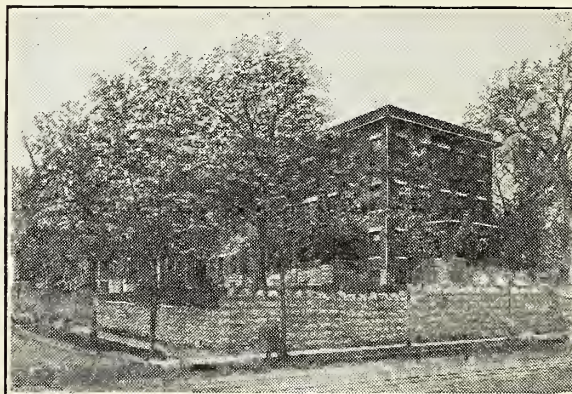
Hynson, Westcott & Dunning, Inc.  
BALTIMORE, MARYLAND

HERMON S. MAJOR, M.D.  
Medical Director

## SIMPSON-MAJOR SANITARIUM

3100 Euclid Avenue, Kansas City, Mo.

Electricity  
Heat  
Water  
Light  
Exercise  
Massage  
Rest  
Diet  
Medicine



Nervous  
Diseases  
Selected  
Mental  
Cases.  
Alcohol  
Drug and  
Tobacco  
Addictions

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

FEBRUARY, 1938

Number 2

## PROGRESSIVE POSTOPERATIVE GANGRENE OF THE ABDOMINAL WALL

A. E. Hiebert, M.D.

Wichita, Kansas

Ever since the cases of abdominal wall gangrene described by Cullen<sup>1</sup>, Meleny<sup>2</sup> and others, there has been an increasing number of such cases reported. In 1931 Lynn<sup>3</sup> reviewed twenty-one cases gathered from the literature, and added one more case. Subsequently Horsely<sup>4</sup>, Scotson<sup>5</sup>, and others have made additional contributions. In most instances the gangrene followed operations for appendiceal abscesses, beginning as an average about a week after the operation. However, this complication has also arisen from infected wounds of the abdominal wall following most every type of abdominal operation; and the time of onset has varied from two<sup>4</sup> to twenty-one days<sup>6</sup> after operation. As causative organisms streptococci and staphylococci have been most frequently named, although a large variety of organisms has been described including diphtheria bacilli<sup>7</sup>, and ameba<sup>8</sup>. The extent of tissue involvement has varied from the skin and immediate subcutaneous tissues to the muscle<sup>6</sup>, and in one case the entire thickness of the abdominal wall<sup>4</sup>; but as a rule the sloughing has been limited by the deep fascia. Radical cautery excision, by common consent, is the most effective means of combatting the infection. Out of three reported cases otherwise treated two resulted in death, and one in which the process finally subsided, required two and one-half years to heal<sup>9</sup>.

As a whole it appears that postoperative gangrene of the abdominal wall is being recognized and effectively treated with more and more promptness, thanks to the efforts of those who have repeatedly brought this condition to the general attention. The following case report seeks justification in the hope that it too may contribute to a lessening morbidity of this most troublesome postoperative complication.

## CASE REPORT

November 11, 1935. W. P., a sixty-nine year old white male was admitted complaining of pain in the right lower quadrant of about six months' duration. For the two previous months the pain had been more severe, but at no time had there been any nausea or vomiting. A gradually enlarging mass in the right lower quadrant had been noticed for about three weeks. Since solid foods added to his discomfort, he had been on a liquid diet for these six months, during which time he had lost thirty pounds of weight. In August, 1935, he was said to have had a severe neuritis of the left upper and the right lower extremities, which subsided after several abscessed teeth were removed. For a year he had had symptoms and signs of intermittant cardiac decompensation.

Examination: The patient was a tall, gaunt, elderly, white male, able to be up, but obviously quite weak. His skin was dry and transparent, and the mucous membranes pale. The temperature on admission was 100 F., the pulse rate 90, the respiratory rate 30, and the blood pressure 130 systolic and 80 diastolic.

Occupying the greater part of the right lower quadrant of the abdomen was a rounded, rather firm, slightly tender, fixed mass. Roentgenologic examination ruled out the right kidney, and showed the mass intimately connected with the cecum, so that a diagnosis of appendiceal abscess or right lower quadrant tumor was made. The heart sounds were fair in quality, although there were numerous extra systoles. The radial arteries were thickened.

### Laboratory Findings: (On admission)

Erythrocytes—2,400,000.

Leukocytes—13,000.

Hemoglobin (Dare)—50 per cent.

Blood Wassermann and Kahn reactions—negative.

Urinalysis—Slight trace of albumin.

November 18, 1935. At operation the mass in the right lower quadrant was found to be a thick



walled appendiceal abscess, which had burrowed its way into the overlying right rectus muscle. The appendix evidently had sloughed. Drains were placed into the abscess cavity and the wound loosely closed in layers about these. Three silk worm gut retention sutures were used. Microscopic sections taken from the thick abscess wall showed chronic inflammation.

The first postoperative week was uneventful. The temperature, which prior to the operation had risen to 101 degrees F. daily, rose to 103 degrees the first day, 100.4 the second, and was normal by the third day. Pus and fecal matter drained profusely from the wound.

On the seventh postoperative day a painful, tender, swollen, dusky red area appeared about the lower retention suture at which point there was a beginning necrosis of the skin. On this day the temperature rose to 100.4 degrees. During the next two weeks the gamut of local and general treatment was run, yet the infection and necrosis continued to spread. By December 11, twenty-three days after the operation, the wound was gaping widely, draining copious quantities of pus and feces (Fig. 1). The process had progressed chiefly to the lateral side of the wound, leaving a dirty ulcer, in which the skin and immediate subcutaneous tissue were sloughing. Pus could be expressed from beneath the undermined skin. Beyond the ulcer was an area in which the skin was bluish red and edematous. Still more peripherally was a zone in which the skin was red-dish pink and then finally faded out to normal appearance. In the midst of all this sloughing remained

two islands of apparently unaffected skin. In spite of the progressive superficial gangrene, the deeper portions of the gaping wound and sinuses continued to heal by normal granulation.

All subjective symptoms were superlative, in fact, far out of proportion with the objective findings. Local pain and tenderness were excessive, so that local treatment was difficult. During the height of the infection severe pains in the extremities set in, so that it was hard to move the patient in bed. Mentally, he was greatly depressed, and would frequently talk of suicide. His appetite and alimentation were poor. Yet the temperature never rose above 100.4 nor the leukocyte count above 13,000.

December 11, 1935. A circumscribing trench was cut with the endotherm knife well beyond the discolored area. This was not carried entirely to the respective ends of the wound, as the infection did not appear to be spreading in these directions. It was the original intention to do a complete debridement of the ulcer at this time, but in view of the very rich blood supply and the active infection, we hesitated, lest a blood stream infection be invited.

January 6, 1936. Only at one point (Fig. 2) did the infection cross the trench previously cut. At both ends where the incision had been too conservative the infection likewise had spread. With the patient under gas anesthesia, all the involved skin and subcutaneous tissue was thoroughly removed with the endotherm knife, leaving intact the two islands of normal skin. Two days later a blood transfusion was given.

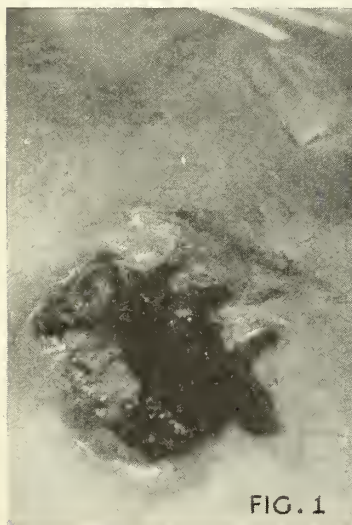


FIG. 1



FIG. 2



FIG. 3

Fig. 1. Progressive postoperative gangrene of the abdominal wall, twenty-three days after the drainage of an appendiceal abscess.

Fig. 2. Wound clean and ready for grafting, after a complete debridement with the cautery followed by the growth of normal

granulations. "X"—Point where the infection crossed the trench previously made by the cautery. Note the islands of normal skin in the midst of the ulcer.

Fig. 3. Ten days after the skin grafting the wound was healed.

The bacteriologic examination of the tissues revealed great numbers of short chained streptococci in the pink peripheral tissue zone, a mixture of streptococci and staphylococci in the bluish edematous zone, and a mixed infection with very little evidence of streptococci in the ulcerated sloughing area.

February 5, 1936. Twelve days after the debridement the ulcer was clean and fecal fistula closed; but the gaping portion of the wound was not sufficiently filled in to permit skin grafting for about another two weeks. At this time a split skin graft was applied to the ulcer using the technique of Blair and Brown. Two weeks later the wound was healed (Fig. 3).

At the present time (December, 1937) the patient is enjoying good general health.

### COMMENT

This was a rather typical case of progressive postoperative gangrene of the abdominal wall, except that the process was slightly more superficial than in most of the reported cases, as it did not extend down to the deep fascia. Surrounded by the most active gangrene remained two islands of apparently normal skin, an observation similar to that of Scotson<sup>5</sup> and that of Nightingale<sup>11</sup>.

Most septic operative wounds of the abdominal wall are amenable to ordinary treatment. Since progressive postoperative gangrene of the abdominal wall is rather rare in the experience of the average surgeon, and since early recognition and treatment of this condition is important, it might be in place to recount the outstanding features of this now apparently established clinical entity.

1. Progressive necrosis about an operative abdominal wound, which does not respond to the ordinary methods of treatment.

2. Very severe local pain and tenderness.

3. Very little temperature or leukocytic reaction.

4. General mental depression of the patient.

5. The etiologic organisms are streptococci and staphylococci.

The above case has served to reemphasize that any treatment short of complete cautery excision of the entire lesion is likely to be inadequate.

### BIBLIOGRAPHY

1. Cullen, T. A.; *Surgery, Gynecology, and Obstetrics*, 1924, XXXVIII, 579.
2. Brewer, G. E., and Meleny, F. L.; *Annals of Surgery*, 1926, LXXXIV, 438.
3. Lynn, Frank S.; *Journal of the American Medical Association*, 97: 1597 (November 28, 1931).
4. Horsley, J. Shelton; *Journal of the American Medical Association*, 98: 1425 (April 23, 1932).
5. Scotson, F. Hector; *Lancet*, 1933, II, 80.
6. Kuppers, Hans; *Centralbl. f. Chir.*, 62: 378-380.
7. Smith, S. W.; *British Medical Journal*, 1931, II, 800.

8. Cole, W. H., Heideman, M. L.; *Journal of the American Medical Association*, 1929, XCII, 537.

9. Kappis, Max; *Beitr. z. Klin. Chir.*, 155: 179-200, 1932.

10. Hoche, Otto; *Centralbl. f. Chir.*, 60: 1458-1460, June 24, 1933.

11. Nightingale, H. J., and Bowden, E. C.; *British Journal of Surgery*, 22: 392-394, October, 1934.

## PSYCHIATRY IN GENERAL PRACTICE

L. Gilbert Little, M.D.

Wichita, Kansas

With the increasing prevalence of mental diseases and neurosis in particular it becomes apparent that more thought must be given these conditions, not only by those specializing in this field but also by those doing general medicine. The distinction between a normal individual and a neurotic is rather hard to ascertain. All so-called normal individuals are potentially neurotic and indeed, few are the adults who have not at some time exhibited some neurotic symptoms during a period of low resistance, whether due to physical illness or emotional strain. Neurotic tendencies may be active at all times or may be dormant and come forth only when the person's resistance is low.

The physician in general practice soon learns to recognize the neurotic or nervous patients, at least the more common varieties. Of course the complex cases and the psychoses are easily discerned, but he is not interested in the latter as this group requires special treatment by specialists and in most cases institutional care. Therefore we will not consider the rare cases or the psychoses, but confine our study to the neuroses and nervous conditions that one finds allied to the organic illness; the cases that come into your office with a physical complaint and you search for an organic pathology.

Many physicians have a misconception of psychiatry. They believe that no psychiatric cases come to their offices and that the psychiatrist has only complex psychiatric cases to treat. In the first part of my paper reference was made that all cases are potentially neurotic, therefore, the practitioner of medicine sees the psychiatric cases before the specialist sees them.

The great stumbling-block hitherto in the treatment, not only of the nervous patient but of disease in general, has been the arbitrary division of illness into functional and organic. Illness is a derangement of the whole personality and in the human being there is no dividing line between the soma (body) and the psyche.



Plato said, "As you ought not to attempt to cure the eyes without the head or the head without the body, so neither ought you to attempt to cure the body without the mind: and this is the reason why the cure of many diseases is unknown to the physicians of Hellas, because they are ignorant of the whole, which ought to be studied also."

In spite of the progress we think we have made in the science and art of medicine, Plato's conception of medicine has been lying dormant for centuries until Dr. Adolf Meyer, well known psychiatrist of John Hopkins University, came out with his psychobiology, which comprises the three-fold treatment of body, mind and spirit.

It is variously estimated that of all classes of patients who consult physicians, the percentage of those not suffering from organic physical disease but from functional nervous disorders to be fifty to seventy-five per cent.

Dr. Frederick P. Moersch of the Mayo Clinic reported psychogenic factors of varying degree in forty-four per cent of 500 consecutive patients at the Mayo Clinic.

Groves B. Smith found at least one fourth of all patients admitted to the department of medicine of Henry Ford Hospital needed psychiatry and conversely of 100 consecutive cases of psychoneurosis of anxiety types only four per cent were free from associated organic pathology.

Strecker states, "It is not an overstatement to say that fully fifty per cent of the problems of acute stage of an illness and seventy-five per cent of the difficulties of convalescence have their primary origin not in the body but in the mind of the patient."

Assistant Surgeon General Treadway writes that four in every ten persons applying for medical advice in the public clinics and dispensaries are invalidated because of mental illness.

The psychic phase of medicine has been neglected by most of our medical schools as they stress the importance of finding some organic condition and in some cases the students are led to believe that underlying all neuroses there is some organic condition to treat. However, our outstanding medical centers, such as Columbia, Harvard and Cornell, realize the importance of the mental factor in illness and have full-time psychiatrists on both surgical and medical service. Alvarez's criticism that students are taught too much science and not enough art is well taken; and he wisely suggested that teachers of medicine should spend more time discussing functional problems so that the student may develop a clearer and more practical concept of psychiatry in its relationship to medicine.

The nervous make-up of an individual may be the causative factor in many organic conditions. In recent years the psychiatrists and psychoanalysts have found the psychogenic factors of the individual to be the etiology of many somatic conditions.

Some forms of allergy have been definitely proven to be of psychic origin. Mucous colitis and peptic ulcer are treated in some cases by psychoanalysis. Exophthalmic goiter has a psychogenic basis and responds to psychotherapy. Constipation and diarrhea are common symptoms associated with anxiety states. Diabetes mellitus is influenced by shock and a diabetic patient may go into coma when undergoing strain, such as an auto accident. Woodyatt states that in such cases the power of emotion can be measured in ounces of sugar. Anders and Jameson state that it has been statistically proved that diabetes in the presence of leanness is more frequent in Jews than in Gentiles, the former being more subject to neuroses; also that diabetes in general has increased owing to the poor nervous hygiene which characterizes our times.

With hyperthyroidism we find we are dealing with sympathetic nervous system imbalance. Eli Moschowitz says, "Graves syndrome is not merely a combination of signs and symptoms but has a common denominator, namely, personality." He says, "There is no doubt in my mind that this personality is not the result of the disease as some aver."

Many disorders, which the physician is called upon to treat, are purely psychic while many others result from psychic influences. In the last analysis the burden of all diseases of whatever nature is borne by the mind. Therefore, it becomes necessary for the physician, while treating any patient, to know whether he is happy or unhappy, whether married, single or engaged, whether he finds satisfaction in his work or if he is out of work. When the patient is a child one must know if it is an only child. He must know what its exact position is in the family, whether it is the oldest or the second child, whether pampered or neglected and what is very important, he must know how it gets on at school. When questioning a married individual it is necessary to inquire into sex life and sex compatibility. Is this embarrassing? Usually not to the patient but to the physician.

Neurotic patients are anxious to talk. They come into my office and start to tell about their symptoms before they even get seated or the formality of greeting has been completed. They may be of any size and appear physically well. They are often accompanied into the consultation room by a relative or a friend, because they have a fear that they may neglect to enumerate all the symptoms. Sometimes they

come in with notes, so as not to forget some important questions. The friends that accompany the patient need careful observation as they invariably distort the picture and must be eliminated as soon as possible. I sometimes do this by seeing the friend at the close of consultation to ease his conscience. These patients are verbose and meticulous in reciting details of their case. They have been repeating their symptoms to relatives and friends and even doctors until the hearers have become disinterested. This leads the patients to exaggerate in order to gain attention. They make one believe their symptoms are very mysterious.

It is interesting to hear the reaction of nervous patients when they have consulted various physicians. They come in with the statement that the doctors are not interested in their case. They say, "The doctor made a thorough examination, took x-rays, made tests and I don't know what all." "He told me that he could not find anything except that I had a little of this or that but not enough to worry about." "I have been to so many doctors. They help me a little, soon I am back to where I was before. That is why I gave up the doctor and went to the chiropractor." One patient concluded with the statement, "That is the reason I went to the electric radio doctor." In fact, I had one patient tell me that the doctor suggested that perhaps the chiropractor could help her. Evidently the physician had tried all the drugs he thought were indicated for the organic symptoms but did not understand the strange symptoms of the psyche.

### CASE REPORTS

A girl of seventeen years came in and gave a history of vomiting after each meal for the past year. She consulted one physician who told her she might have a brain tumor but he was not sure. The second physician insisted the patient stop vomiting. This angered the patient and she changed to a third doctor who searched for an organic condition and removed her tonsils. Following the tonsillectomy she ceased vomiting for several days. Her mind was concentrated on her painful throat. When the pain subsided her thoughts again centered on vomiting as her worry had not been relieved. The physician at this point lacked tact and told her she could stop vomiting if she wanted to. As a result she left him and for several months she was content to go on with her handicap. When mid-year examinations faced her, the vomiting was not sufficient to shield her in case she should fail the already light course she was taking. She added another symptom and then went in search of a good chiropractor.

A friend of the girl recognized a personality change and referred her to me. I soon discovered that the vomiting was a curtain and behind this curtain was the fear that she might not pass her mid-year examinations. We discussed the mid-year examinations and her ambitions, the vomiting was woven in each time as though it were a part. After several interviews she no longer needed the vomiting. Was she cured? No, she was relieved of that situation as she understood the meaning of vomiting. She is anxious and suggestible.

The examining physician must keep in mind that these cases are much less aware of their condition than is usually supposed. Though they may be ill for a purpose, the motivation is subconscious or at best only partially conscious. Furthermore, the illness may persist long after the need for it and the cause which originated it have ceased to exist. The symptoms, though they may seem unreal or unjustified to the physician, are terribly real to the patient. The physician must then adopt an attitude of sympathetic understanding in making his inquiries. When the patient appreciates the importance of the desired data, little difficulty in examination is usually encountered.

Every practitioner has the experience of having patients come into his office with the complaint of being tired and wanting an examination. Sometimes they use the expression, "I want you to look me over." When the physician attempts to get a history of these cases the information volunteered by the patients is frequently very vague.

A patient came in complaining of nervous twitching under his scalp. He described a feeling of worms crawling under the skin. He had the same sensation in his thighs. The history was vague upon the first visit. Neurologically, there were no findings of any value except that the deep reflexes were exaggerated. It was evident that he had been rather tense for some time as he gave a history of chronic constipation, sex incompatibility with some promiscuity. A few months before I saw him he had a hemorrhoidectomy. When he returned to the surgeon complaining of being nervous and having an enlarged prostate, the surgeon tried to assure him that his prostate was normal and that he should quit his worry.

This patient was encouraged to talk and tell me about his difficulty. After unburdening himself about his sexual escapades and fear of impotency I found he worried only when he heard the subject of prostate discussed over the radio. After the radio discourse he noticed his inability to make a free urinary stream. We discussed the radio, his fear of impotency and the sense of moral guilt. A series of



treatments revealed that the essence of the difficulty was the unconscious sense of guilt and punishment.

P. E. Morhardt states, "The role of psychic factors is especially important in hypertension." Pal, Huchard and Glaser believe that hypertonia can be cured by psychotherapy. Kylin believes that emotions play the most important role in the origin of essential hypertension. By way of illustration:

A young man twenty-nine years of age, with blood pressure 190 mm. systolic over 90 diastolic came in because a physician showed alarm and doubt about his pressure. Since hypertension was a family characteristic he wanted treatment. Physically there were no findings other than symptoms of hypertension. After considerable time he brought out that he did not sleep well and that the family history was not unusual. On the second visit he felt a little more at ease and told about his secret companionate marriage, that the girl had died and he was afraid her parents would find him and accuse him of her death. After a short time his pressure came down to 160-150 and finally 130 (with small doses of phenobarbital and psychotherapy). After I gained the confidence of this patient, I learned he had been brooding over the death of this girl until he had ideas of reference and imagined people would sneak upon him and stab him in the back. This fear prevailed both day and night. It seems he was under this tense state with the dread of being found out and having to explain his illegal marriage. To me he poured out his pent up feelings. It was no longer a hidden secret as he had told at least one person. There were times when his systolic pressure would rise and each time he would have a pressure of speech and unburden himself with a resultant drop in hypertension. This tense state keeps the arterioles in a spastic contraction with resultant hypertension. This is frequently demonstrated in our arteriosclerotic and senile cases in which a sudden out-burst of anger increases hypertension.

Emotions may cause cerebral hemorrhages and in this connection we have MacWilliams' statement that dreams play a role; in the fact that cerebral hemorrhages occur during the night although the arterial pressure is low during sleep. He has observed that fearful dreams may send the pressure up twenty to seventy mm. which suffices to rupture the wall of an injured artery.

M. S. a girl of thirteen years was referred to me with diagnosis of convulsions. She was undernourished, otherwise there were no physical findings of importance. The history of convulsions was rather indefinite and vague. The convulsions came on in the morning. It was described as twisting of the

face and that she became unconscious. This problem became progressively more frequent until it occurred during the day at each mealtime, and later even in school in the Latin class. It was rather difficult to get a good description of her convulsion as the father gave a distorted picture. The classical symptoms of epilepsy were not mentioned by the patient. The patient was taking fifteen grs. of triple Bromides Bid when she came to me. This was discontinued.

A careful history of all symptoms was taken which showed that she had a spasm of the face regularly at all meal times and in the morning when she awoke. The spasm during the day occurred without regularity except in Latin class when she was called upon to recite. I found she did not like her Latin teacher because the teacher would call on her to recite when she was unprepared. At the family table sat the housekeeper, who was partial in that she expected the patient to do more than her share of the house work. The patient's mother had died and the father was interested in the housekeeper.

This patient was requested to demonstrate the spasm in my office. After some hesitation, but with suggestions and a few minutes thinking about Latin and the mean teacher, she demonstrated a psychtic where the left angle of the mouth was drawn back with clonic contractions accompanied by the downward rotation of left eye-ball. This lasted about one minute. She did not fall, neither did she respond to external stimuli such as questions. The facial expression was quite obviously an expression of anger. I did not feel that the patient was intelligent enough to be told the real cause of her trouble, therefore a systematic course for facial exercises was instituted.

This comprised a group of about ten separate exercises each having two minutes duration. She was instructed to carry out this program four times daily for several days and permitted to decrease as she improved. During treatment Latin and the teacher were discussed freely. (I might state here she was not greatly distressed about this difficulty until it began to occur in school.) She was desensitized to the teacher and gradually shown that she had a nervous condition and not a convulsion. The term "convulsion" usually signifies epilepsy to the laity and as she was embarrassed with her affliction, she could now tell her friends it was only a nervous condition. At no time during treatment could she be told that the tic was associated with anger. She was taught to build up a tolerance for her Latin teacher and encouraged to return to her schoolwork with zeal as she was anxious to achieve good scholastic standing and thereby receive praise.

It might be of interest to cite a case of hysteria

that I encountered in my days of general practice. At that time I diagnosed the condition as chronic or neurotic of some type; probably because I cured her of so many complaints. She was a single woman in the early thirties, who had a number of operations. One ovary was removed, later the uterus and then one kidney. Patient also had a tonsillectomy and an appendectomy. A number of other operations were performed in an attempt to reduce a herniation of the operative scar. The patient lived with her father and sisters. The mother died before the patient was in her teens. She managed the home for her father.

This woman would go to bed with varied complaints and within an hour or two go into an opisthotonos, turn head from side to side, grind her teeth, turn her eye-balls in all directions, sometimes moaning as though in great pain. Her arms were twisted, so to speak, sometimes one was over the herniated area of the kidney attracting my attention to this area. Upon suggestion of the family, I treated the case as all other doctors who had been called on the case before me. By inducing sleep, this patient would rouse from her hysteria and after twenty-four hours required a second visit from the physician to treat her for some organic condition.

The symptoms were varied, all depending on the part of the body or organ on which she centered her mind; pain in the area of herniated kidney, headache, or pressure on the chest with inability to get a full breath. Usually these hypochondriacal pains subsided after I gave her due consideration and drugs.

Because the patient complained so often of pain in her side and insisted the hernia was painful, I also suggested an operation to which she agreed but the surgeon, who had performed all previous operations, could not find the herniation of sufficient significance to operate. This angered my patient and she did not wish further consultation with the surgeon.

These hysterical symptoms continued until the patient's father died when they became less frequent as her sisters would not tolerate the tantrums. Fearful of making a morphine addict out of my patient, one hot August day when I was called to see her, I wrapped her face and head in a turkish towel filled with crushed ice. She came out of the stupor but it was several days before she could go about her household duties. Sometime later during a tantrum, a sister tried the ice towel application whereupon the patient roused up and gave her sister a whipping. That ended the hysterical episodes but not the hypochondriacal symptoms.

I mentioned this case because it belonged to the field of psychiatry. The patient would go to bed and become ill whenever the family crossed her or her

wishes were not considered. On one occasion she became upset because her father refused to quit smoking his pipe in the house. She could not get up from her bed as soon as the family conceded to her wishes and pretend that everything was forgotten as that would have been too childlike and her conscience would still have been tortured. She was carrying out a childhood tantrum with the addition of adult reasoning of covering up her motive of trying to regain the love of father.

Sometimes our patients forget the primary reason for hypochondriacal pains. A minor pain is localized, for instance in this case first in the reproductive organs. She did not marry, maybe she was not asked to marry or perhaps she had a strong "father tie up" and could not leave the father as he needed someone to care for him in his old age. Therefore, we have this unconscious complex manifested by pain, centered in the uterus and ovary which is so common in our female patients expressed in dysmenorrhea.

Each time the nervous or unstable individual has an unpleasant situation, which calls for a defense mechanism to help the patient out of the predicament, the pain returns and finally an operation is agreed upon as the only means of relief from pain. The patient is operated upon, recovers and leaves the hospital improved, even cured. Everybody is happy. The patient has not been cured of her personality imbalance and when she again faces her old complexes she will require an outlet for her emotions and soon will have pains in a different organ, but related.

The urinary system is closely allied to the regenerative system and in the case which I mentioned, the patient focused so much attention to her kidney pain that she required an operation. A hernia, unfortunately for the surgeon but fortunately for the patient, kept her mind centered in this region and not in search of another organ.

A well regulated psychopathic or state hospital does very little surgery as they feel that the patient realizing a personality change will rationalize and try to establish an organic condition to prove that he is ill rather than be considered insane.

It is naturally easier for a patient to make a satisfactory mental adjustment if he is not physically sick, but it must be remembered that operative procedures often act as added psychic trauma and any prolonged surgical or medical treatment may serve to fix more deeply in the patient's mind the idea of his illness.

When we consider the overcrowded conditions of our state hospitals and that mental cases occupy sixty per cent of all hospital beds in the United



States, it becomes necessary for the medical men to think in terms of preventive mental hygiene with as much consideration as has been given to preventive physical hygiene. Mental diseases as a whole are gradual in the onset. In all cases there is a personality change which can usually be traced back to the nursery.

Much has been done in the past few years through our Child Guidance Clinics and Juvenile Research Organizations in order to detect these personality changes in their incipency. Psychiatry plays a very definite role in the field of pediatrics. It is essential that the pediatrician have a psychiatric viewpoint in order to understand the cyclic vomiting of children and to realize that a case of enuresis in a child, that has been trained in toilet habits, reverts to babyhood because it is jealous and wants to be assured of the mother's love. Quite often this is demonstrable in the older child shortly following the birth of the second child.

Whether in a given setting the child will or will not develop a neurosis depends to a large extent on the particular psychic disposition and on the inhibitions that the child receives from his surroundings. If a child develops an anxiety neurosis there is no doubt that an educational mistake has been made. The education of the infant should begin as soon as the obstetrician has delivered the mother of her child. I believe the future of preventive psychiatry lies in the field of pediatrics.

Psychotherapy begins with the first contact with the patient. The fundamental objective for the physician is the establishment of emotional rapport with his patient. Definite therapy begins with the first contact and the proper approach often determines the outcome. A painstaking history must be taken. The patient must be impressed by thoroughness. He must be made to feel that he is getting your undivided attention, and that you honestly believe what he is telling is true. It is a mistake to display a critical attitude or to raise an eyebrow in astonishment when a patient tells about his or her extra-marital relationship.

Never tell a patient or suggest that his symptoms are imaginative or that nothing is wrong, "go home and forget about it." How can the patient forget pain that is so real to him without a definite program to follow? One must be a good listener and encourage the patient to talk out everything.

It has been our neglect of the psychogenic illnesses that has permitted the rise of various cults. Just as long as the patients that have psychic problems are treated by physicians who do not understand them, or lack interest in their problems, we will find

the cults of all kinds flourishing and trying to get into the back door to practice medicine. The so-called nervous patients roam around until they find someone that shows them sympathy and attention for which they are yearning.

When one considers the numerous and intelligent devotees following cultism, we have proof that medicine is neglecting a very important part of the patient, the mind and its function and influence.

## BIBLIOGRAPHY

1. Allen, Charles Lewis: Relation of Psychiatry to the General Practitioner. *California & Western Medicine*. February, 1933.
2. Bennett, A. E.: Role of Psychotherapy in General Medicine. *Journal of Iowa State Medical Society*. December, 1935.
3. Ebaugh, Franklin G.: Childhood Psychiatry. *Journal of Pediatrics*. October, 1936.
4. Harding, George T.: Neurosis in General Practice. *Ohio State Medical Journal*. January, 1937.
5. Moersch, Frederick P.: Psychiatry in Medicine. *American Journal of Psychiatry*. March, 1932.
6. Morhardt, P. E.: The Psychic and Emotional Factors in Organic Affections. *LaPresse Medicale*. February, 1928.

## MINIMAL CASE FINDING IN PULMONARY TUBERCULOSIS

C. F. Taylor, M.D.<sup>†</sup>

Norton, Kansas

An article on the minimal case of tuberculosis reminds me of the old pastor down south who, on being asked about the secret of his success with his flock, said, "First I tells 'em what I is going to tell 'em; then I tells 'em; then I tells 'em what I told 'em."

For years we have been getting a large percentage of far advanced cases and a very much smaller percentage of minimal cases. The same thing is true with practically every sanatorium in the country. See Table I.

Consistently, we find much the same general percentage admitted year after year.

## PROGNOSIS

Of the cases dismissed in 1930 and 1931, we find 160 far advanced, of which we were able to trace 109. Of those that we could trace after five years 91.74 per cent were dead. This represents largely the type of case on which nothing could be done beside putting them in bed. Of the minimal cases discharged in the same period there were twenty-nine, of which we were able to trace eleven. While this is far too few a number from which to draw conclusions, nevertheless, it bears out the contention that the sooner we get that case and the more minimal cases we can get, the more there are who are going to get well of tuberculosis. None of the eleven cases

<sup>†</sup> Superintendent, Kansas State Sanatorium for Tuberculosis, Norton, Kansas.

TABLE I  
TYPES OF CASES ADMITTED

Year	Far. Adv.	Percent- age	Mod. Adv.	Percent- age	Minimal	Percent- age	No Clin. Tbc.	Percent- age
1930.....	227	46.2	162	33.0	66	13.4	36	7.3
1931.....	186	47.9	83	21.4	59	15.2	60	15.5
1932.....	181	45.0	77	19.2	75	18.7	69	17.2
1933.....	189	48.3	87	22.2	58	14.8	57	14.5
1934.....	201	48.8	98	23.8	38	9.2	75	18.2
1935.....	233	51.9	110	24.5	39	8.7	67	14.9
1936.....	220	57.4	93	24.3	29	7.6	41	10.7
1937.....	306	61.6	114	22.9	36	7.2	41	8.2
Ave. ....	218	51.0	103	24.1	50	11.7	56	13.1

traced were dead. So it is not entirely out of line to ask the question why we get so many far advanced cases and so few minimal cases. Out of 1,392 consecutive admissions, 11.7 per cent were minimal and an average of around fifty-one per cent were far advanced.

We assume that practically all of our far advanced cases have gone through some minimal phase before they are far advanced. If this be true then they either have no signs or symptoms and consequently do not go to their doctor, or the evolution of the symptom complex is so slow and insidious that it does not reach their "conscious level" during the time that they were minimal. We wonder, however, if many cases do not assume a generalized involvement almost at once.

It was with these things in mind that we analyzed all of the minimal cases of tuberculosis that were brought into the sanatorium from 1930 through 1937. The fact that most of these were brought into the sanatorium probably meant that at some time they had had some symptoms. But since we have made a routine practice of examining contact cases, who did not come to us because they were sick, but on whom we found active or arrested tuberculosis, we feel that in all probability there was a time in which they had the disease process with no symptoms.

A statistical study of these cases is presented in Table II. In all of these cases, we acknowledged that an apical lesion as seen in the x-ray was tuberculosis unless we could prove it otherwise. While this is not 100 per cent true, it is so nearly true that for practical purposes we could call them all tuberculosis and our figures would not be far wrong.

To find out the comparative value of various procedures we go through to make a diagnosis of minimal tuberculosis, I gave the present illness the arbitrary value of one and tabulated the rest of the

procedures accordingly, which is shown in Table III. This is tabulated on the basis of the frequency in which a positive answer could be obtained. According to this the value of the x-ray heads the list by long odds. Regarding the sputum test—it is perfectly possible that the patient might have had a positive sputum early in the evolution of the disease before they came to the sanatorium, hence I surmise that this figure (fourteen per cent, Table II) on the sputum test is probably low, despite the fact that repeated sputum tests and cultures were made.

From this we might conclude that if we adhere to the time honored method of using the stethoscope and calling that a physical examination, our "batting average" at the sanatorium, at least, would be around twenty-two per cent (Physical examination, Table II), compared with the x-ray at 100 per cent. So much for the value in mathematical terms of our methods in making a diagnosis in a minimal case of tuberculosis.

The next thing that impressed me with the whole study was the fact that the idea that tuberculosis is contagious apparently has not been utilized to any great extent in our case finding methods, and then only within the last few years. In a case of diphtheria for example, we would have no hesitation about running routine smears on the contacts to find out whether or not we could find diphtheria bacilli, and yet we hesitate to do routine examinations, x-rays, tuberculin tests and sputum tests on our contacts with tuberculosis. Let's use in tuberculosis work that contagious sense we use in other contagious diseases. We suppose that at least one of the etiological factors in a break with tuberculosis is repeated exposure to tubercle bacilli. We do not know whether a single exposure will produce a clinical tuberculosis or not, but repeated exposures imply prolonged contact; hence the most logical place to find early cases



of tuberculosis is in the contacts of the known case. This has been recognized in many places, particularly in the east. We used to speak of racial and family immunity, and while it undoubtedly exists as a factor, it is extremely doubtful whether it compares with the factor of repeated contact. Again, the economic status of the person which leads to close contact is undoubtedly a very grave source for the development of tuberculosis.

TABLE II

	No. Positive	Percentage of Total
Family History .....	79	64
Past Medical History .....	42	34
Present Illness		
Cough .....	77	63
Loss in weight .....	51	41
Color raising .....	36	29
Pleurisy .....	50	41
Night sweats .....	29	23
Tiredness .....	63	51
Raising sputum .....	45	37
Temperature .....	57	46
Tuberculin (record incomplete)		
X-ray .....	121	100
Physical examination .....	27	22
Sputum test .....	17	14

We developed very many family histories showing the tuberculosis in several generations, and as I look back through these histories I find the following are types.

(A) The patient has tuberculosis. One of the mother's brothers died of pneumonia. Father has a chronic productive cough. The mother died of tuberculosis and was a patient in another sanatorium with far advanced tuberculosis and went home against advice. One sister has tuberculosis. The sister's child has a tuberculous infection as shown by the tuberculin test.

(B) The patient has tuberculosis. The father's mother died with tuberculosis. The mother died with tuberculosis. Two of the youngsters have tuberculosis which is clinically active. One other youngster has an apicitis in which we might question the activity.

There is no man among you but who can duplicate histories like this many, many times. Consideration of these family histories lead to the concept among us of the family as a contagion unit. We have made a routine practice in the past few years of repeated examinations, including x-ray and sputum examination of these immediate contacts. Enough time has not elapsed to give a detailed statement as to the

number that have tuberculosis, who have developed it, or who will develop it, but it apparently promises much in the way of detection of the pre-symptom type of tuberculosis and we have had very little trouble in convincing the family as a unit to undergo routine check-ups.

Recently, under the impetus of the national, state, and local tuberculosis units, there has been a wide spread drive on mass tuberculin testing, which has been extremely valuable in showing the average rate of tuberculous infection, but which is valueless in finding cases of tuberculosis unless we take the positive reactor and find out who is "seeding down" that case. In other words, it indicates where the infection is. To profit by this knowledge, we must go back into the family and see who is the chronic cougher and who has tuberculosis.

A few words might be said of caution concerning the use of tuberculin in this respect. Have your tuberculin fresh—keep it in the ice box. Be sure that your tuberculin syringes are sterile and chemically clean. Read this test in the prescribed time, i. e. in forty-eight hours. Do not expect a necessarily positive tuberculin test in the far advanced case of tuberculosis. You will almost always get a very marked positive in the minimal cases and in those cases in which the physical examination is absolutely negative, but who have been exposed. Experience teaches us, that in the ordinary tuberculin test on the far advanced case that is quite sick, we might have a negative reaction.

So the detection of the early case of tuberculosis means to us:

TABLE III

Family History .....	1.7
Past Medical History .....	.9
Present Illness .....	1
Cough	
Loss in weight	
Color raising	
Pleurisy	
Night sweats	
Tiredness	
Raises sputum	
Temperature	
Tuberculin (record incomplete)	
X-ray .....	2.5
Physical Examination .....	.59
Sputum test .....	.38

First: a knowledge of our limitations in the use of the stethoscope and methods of physical examinations, including all of the various maneuvers leading toward that diagnosis. It means that the diagnosis of these minimal cases of tuberculosis was the result

of a routine analysis of the history of contacts, and the history of the case itself, not only from a cross sectional standpoint but from a longitudinal standpoint including x-rays and repeated sputum tests. It also means that despite the fact that we believe the x-ray is the most valuable unit, there is such a thing as a poor x-ray, which is of no use from the standpoint of diagnosis. This led us to the study of what constitutes a good x-ray and how to make it.

Second: The conception that tuberculosis is contagious, that the family is the "unit of contagion", that we can run down the limits of this infection by the routine tuberculin test, then follow this up with repeated examinations of known contacts in the family of an open case of tuberculosis.

Third: There is an early phase in the tuberculous activity of the lung in which there are no signs and no symptoms.

## COOPERATION BETWEEN THE STATE MEDICAL AND PHARMACY BOARDS\*

Walter Varnum†

Lawrence, Kansas

Organization is not new to this generation. Perhaps it is more highly specialized today, but it has been with us since the beginning of time. We read in our ancient literature of the formation of tribes or clans to protect our ancestors against the ravages of wild beasts that roamed the country at large. As the results of this protective measure were satisfactory, so did two or more tribes combine under one leadership to protect themselves from the more aggressive and warlike tribes in their vicinity, and from that start organized effort has been recognized by men and nations as an absolute necessity for protection against invasion by those who are actuated solely by selfish motives.

Members of the two professional groups that safeguard public health—medicine and pharmacy—have long ago recognized the advantages of uniting forces and working together for the best interests of all three: public health, medicine and pharmacy.

Until very recently the only organized effort along this line had been by local groups of doctors or druggists who, finding that a particular problem peculiar to the public health phase of their community life could not be solved without assistance from their allied professions, formed county associations

and thus added double strength to their convictions. There have been several such groups formed in different parts of the state within the past few years but, lacking the impetus of a broader purpose, they served their immediate need and were cast aside.

A few months ago the State Board of Pharmacy and the State Board of Medical Registration and Examination were brought face to face with the necessity for a closer cooperation between the two offices. Evidence presented to the Board of Pharmacy by the Protective Prescription Bureau\* indicated that two druggists in one of the larger Kansas towns had been guilty of substituting on a doctor's prescription. These druggists were cited to appear before the Board to show cause why their certificates should not be revoked. Substitution is not a punishable offense according to the Kansas statutes, except that the druggist is responsible for the quality of drugs used, and it was the opinion of our attorney that our case was not strong enough to justify the revocation of either license; however, it was felt that the guilty parties should be severely reprimanded and warned that a second offense would not go unpunished.

The Board and an Assistant Attorney General worked out a plan providing that upon proof of a second substitution by a registered pharmacist, the Secretary of the Board of Pharmacy would hand the results to the Attorney General who in turn would notify the Secretary of the Board of Medical Registration and Examination and he would be at liberty to circularize all the doctors in that town advising them of the unethical habits of substitution practiced by this certain druggist. Neither fine nor imprisonment would be a greater punishment for the erring pharmacist, and present reports indicate that these two substituters fear the strength of the two Boards under cooperation, and they have reformed.

The Secretary of the State Board of Medical Registration and Examination, Dr. J. F. Hassig, readily approved our proposed method of handling these substituters and agreed to carry out his part of the plan should it become necessary. This incident developed into a realization of what could be accomplished through simple cooperation and led to a joint meeting of members of the State Board of Medical Registration and Examination and the State Board of Pharmacy held at Lawrence on November 13.

As far as any of us knew, this was the first meeting of the public health boards of medicine and pharmacy ever to be held in the state and we felt that we were, in our small way, making history.

\* Presented before a meeting of the Douglas County Medical Society, January 4, 1938.

† Secretary Kansas State Board of Pharmacy.

\* A national bureau sponsored by the manufacturers of drugs and pharmaceutical preparations.



Out of this meeting came a resolution by each board addressed to its state association recognizing the need for a closer cooperation between the two professional groups. I have the honor to quote herewith both recommendations:

"Be it resolved by the Kansas State Board of Pharmacy that it recommend to the Kansas Pharmaceutical Association the appointment by the President of that Association of a committee of three reputable and practicing pharmacists within the State of Kansas, who are members of the Kansas Pharmaceutical Association, the purpose of such committee to be to work with a similar committee from the State Medical Society for a better understanding between the two professions and a solution of the problems that affect the two groups." Signed by Otto Kuether, President; Walt Varnum, Secretary; Kelsey Petro, Treasurer; W. F. Sprague and Gene Cook, Members, of the State Board of Pharmacy.

"At a joint meeting between the Kansas State Board of Pharmacy and the Kansas State Board of Medical Registration and Examination, held at Lawrence, Kansas, in the W-R-E-N building, November 13, 1937, it was unanimously agreed that each board recommend to their respective State Societies the appointment of a special committee, composed of three members for the purpose of working together in an effort to have a mutual understanding and help solve the problems concerning the two groups thereby firmly cementing the two professions.

"Be it therefore resolved that the Kansas State Board of Medical Registration and Examination now in regular session at the Kansan Hotel in Topeka, this 14th day of December, 1937, respectfully request the Kansas Medical Society to appointment by the President of such a committee." Respectfully submitted by O. S. Rich, M.D.; H. E. Haskins, M.D.; J. E. Henshall, M.D.; M. C. Ruble, M.D.; F. S. Hawes, M.D.; J. A. Wheeler, M.D.; and J. F. Hassig, M.D. (members of the State Board of Medical Registration and Examination).

These recommendations have been presented to the respective state associations but as yet the names of the special committee members have not been announced, either by the medical society or the pharmaceutical association. However, we expect the committees both to be chosen within a short time so they will have an opportunity to get started on their work well in advance of the next legislative session. The manner of organization, the method of attacking our various problems, and the scope of the work to be done by the joint committee, will all be determined by the committee itself; and I only wish to touch upon the possibilities and the advantages which a close cooperation between the state boards of medicine and pharmacy can bring to both professions.

The ever-present threat of adverse legislation is probably the greatest reason why it is not only desirable that the two groups join forces, but absolutely

necessary that we do so if either is to survive the trend that could carry us both into oblivion and continue to guard and protect the public health of the people against their own misguided judgment. Physicians and pharmacists have been dealing in public health all of their lives. Who then is better qualified to pass judgment on the public health laws that come up for consideration in some form or another in every session of our legislature? The two groups united together under a public health banner could present a force strong enough to convert the most obstinate politician, whether the issue be the enactment of new legislation favorable to the medical and drug professions or the opposition to objectionable laws.

A powerful organization of the two professional groups is not going to happen accidentally; on the contrary, much careful planning and no small amount of executive work will be required of the joint committee of doctors and druggists, the two boards, The Kansas Medical Society and the Kansas Pharmaceutical Association to get the two groups working together effectively all over the state.

Fortunately the ground work is already laid. The work of the state pharmaceutical association is carried on by means of the county captain plan. Each county is supervised by a resident druggist and he, as captain, is responsible for contacting the legislators in his district relative to any matters affecting the drug interests, and in many other ways conducting the activities of the drug association in his county.

I am under the impression that there is a county association of medical men similar to this one in practically every county in the state. These groups likewise carry the work of your state medical society into every corner of the state, in addition to performing a great many extra services to the different communities.

So you see that we are attempting to do separately what we certainly could accomplish if our efforts were united and our purpose strengthened by the public health angle. One of the tasks that will confront the newly created state committee of doctors and druggists will be to bring the medical associations and drug groups together within a county to discuss some of the problems that affect public health and the two professions in order that each county will be organized and ready to function by the time candidates are announced for the next election. It is often times easier to reason with a politician before he is elected than after he begins to feel the independence of victory.

There is no limit to the services which the joint state committee can perform for the two professions.

During the last session of our legislature those who were handling the legislative program for the pharmaceutical interests were just as anxiously watching laws sponsored by the medical profession as you were, and they did some work in regard to the Basic Science Law. How much more the two groups could have done if we had been more closely aligned remains to be shown by next year's results.

We have heard a rumbling which might indicate that some of the drug store owners because they want, without regard for public health, a plentiful supply of low-waged employees in order to operate their stores as cheaply as possible, may attempt to have introduced into the next legislature a bill which would repeal the college requirement law for pharmacists. You physicians don't want your prescriptions filled by porters and correspondence school pharmacists, and I need not elaborate on the statement to show how injurious such legislation would be to public health. Under this cooperative plan between the two boards and the two professions we would expect the physicians to lend their support and influence to defeat the purpose of those who would sacrifice public health to fatten their own purses on cheap help.

Although we do not know what the future will bring, we have only to study the trend of the times to see in what direction we are being carried. Until quite recently we have looked upon socialized medicine as one of those things that "can't happen here". However, I notice that the last American Medical Association convention rejected a proposal that all doctors become officers of the Public Health Service; and at the last annual Drug Trade Conference the present-day trend toward state medicine and group health clinics was presented as a problem in the drug industry. We can no longer close our eyes to these developments. Both the medical and the drug professions have recognized the trend; the outcome depends largely upon our own actions.

The indigent patient has always been with us and will always be a problem, the only new and different factor is the attitude of the public and the government toward him. The thing that is lending force to the argument for socialized medicine during these times of unemployment and readjustment is the desirability of keeping the indigent man in good health in order to keep him off the relief rolls.

Whether we like it or not, we must work together to provide some substitute for state medicine so that if and when it eventually is introduced into our legislature we can rise up together and show the law-makers that it is neither needed nor desired in this state.

These and many other problems affecting the two professions need the combined attention of a committee of physicians and pharmacists from a state-wide viewpoint, and it is hoped by the medical and pharmacy boards that our recommendations to the two state associations will receive the hearty approval of every doctor and every druggist in the state.

In closing I wish to compliment the officers and members of the Douglas County Medical Society upon taking the lead in this organization work, as this is the first meeting to be held under the state-wide plan. We appreciate the invitation to be with you and I hope that the results will warrant future meetings of the two groups.

---

## ACTION OF ESERINE ADMINISTRATION DURING HOMATROPINE-BENZEDRINE CYCLOPLEGIA\*

Lyle S. Powell, M.D.

Lawrence, Kansas

Marshall E. Hyde, M.D.

Osawatomie, Kansas

This is a further report made from studies pursued at the Osawatomie State Hospital in which various drugs are being used for the production of cycloplegia and mydriasis, together with the effect of certain other drugs on the recovery period. It is felt that mydriasis and cycloplegia are both important in the examination and refraction of the eyes of young individuals, but the economic and social aspects of a long recovery period are also recognized. It is hoped that the following information may contribute somewhat to a cycloplegic routine that may serve the purposes for proper examination and still be more graciously accepted by the patient.

SECTION A: Observations on the action of one per cent APL eserine, made on ten physically healthy patients between the ages of fourteen and thirty years.

### PROBLEM

The objective in this study is to observe, determine and record:

1. The degree of cycloplegia that occurs following

\* From the Department of Ophthalmology, Osawatomie State Hospital, Osawatomie, Kansas.



the administration of homatropine and benzedrine according to our standard practice plan.\*\*

2. The action of one per cent APL eserine and its effect upon the eye when administered during the height of the homatropine-benzedrine cycloplegia.

#### MATERIALS USED

1. Homatropine two per cent solution purchased from a regular prescription pharmacist.

2. Benzedrine sulfate ophthalmic one per cent solution.

3. Special one per cent eserine solution, this being a solution of eserine salicylate buffered to a p-H of 6.2 (tear isotonic).

4. Jaeger test type.

5. Prince rule.

6. Flashlight.

7. Millimeter ruler.

8. Bailliant tonometer.

9. Retinoscope and trial case.

#### PROCEDURE

Preliminary to drug administration, the near vision as determined by Jaeger test type, the accommodation as determined by the Prince rule, the size of the pupil and the reaction of the pupil to light were observed and recorded.

Homatropine two per cent was administered gtts. one in each eye of each patient observed and repeated in five minutes. Five minutes following the second administration of the homatropine, the one per cent benzedrine was instilled one gtts. in each conjunctival sac. Observations made, recorded and tabulated were:

1. Pupillary activity to light and accommodation.

2. Pupillary size.

3. Accommodation—as measured by the Prince rule.

4. Intra-ocular tension—as estimated by the Bailliant tonometer.

5. Refraction—by retinoscopy and trial case.

Observations made prior to drug instillation were repeated one-half hour, one hour, and one hour and twenty-five minutes following the administration of the homatropine. One and one-half hours following the administration of the homatropine, one per cent eserine APL was administered one gtts. in each eye. The observations previously made were repeated at stated intervals, these being one-half hour, one hour, three hours, and five or six hours after the administration of the eserine.

#### RESULTS OBTAINED

Results are recorded in tabular form and available upon application to the authors.

#### COMMENTS ON RESULTS

1. On the size of the pupil: There occurred uniform and consistent dilatation of the pupils in all patients in this group of ten patients following the administration of the homatropine and benzedrine. This dilatation was quite marked within thirty minutes, but in a few instances was slightly greater at the end of one or one and one-half hours than at the end of one-half hour. The size of the pupil increased to either eight or nine mm., starting usually from four or five mm., following the administration of the homatropine and benzedrine. After the administration of eserine one per cent there occurred a relatively consistent slight to moderate decrease in the size of the pupil. This amounted to only one or two mms. in a good many patients at the one-half hour interval following the administration of the eserine, but at the end of one or two hours this drug had produced a decrease in the size of the pupil that often amounted to as much as four mm. with the consequent return of the pupil to its original size.

During the first one or two hours, there occurred occasionally an inequality of the pupils.

2. On the reaction of the pupil to light: The pupils were uniformly reactive to light prior to drug administration. The pupils became uniformly and consistently inactive to light following the administration of homatropine and benzedrine. The pupil remained uniformly and consistently inactive to light as long as one hour following the administration of the one per cent eserine. Three hours and fifteen minutes following the administration of the one per cent eserine there was a fairly uniform and consistent pupillary response to light in all patients. This was an unusual type of pupillary response in that the pupils would constrict in the presence of the bright light, but they would remain constricted in most cases for at least a short time following the withdrawal of the light. Pupillary response to light was fairly normal at the end of six and one-quarter hours.

3. On the change in accommodation: Complete cycloplegia was obtained in eight of the ten patients following the administration of homatropine and benzedrine. The two others were unable to read better than J7 and for practical purposes probably could be included with the eight that obtained complete cycloplegia. Following the administration of eserine, as soon as one-half hour and persisting with a minimum of variation for at least six hours, there occurred in all patients a moderate to marked increase in accommodation. Actually the patients' ability to read the Jaeger test type and their accommodation as disclosed by the Prince rule was as much or more one-half hour following the administration of eserine

\*\* Drops two of homatropine two per cent solution in each conjunctival sac at outer canthus. This is repeated in five minutes. Five minutes after the second instillation of homatropine, two drops of benzedrine one per cent solution is instilled in like manner.

than it was before the homatropine and benzedrine were used. This eserine action was apparently a little more marked an hour following its administration, and there was a noticeable tendency in a few patients for a diminution of accommodation to occur at the end of three hours; however, at the end of six hours there was present as much accommodative power in all patients as there was prior to the administration of homatropine and benzedrine.

#### SUMMARY

Homatropine and benzedrine used in combination, according to the method outline elsewhere, produces complete cycloplegia in a very high percentage of patients. One per cent APL eserine administered during such homatropine-benzedrine cycloplegia very promptly overcomes completely this cycloplegia and produces within one-half hour an apparent complete return of accommodation with diminution in the size of the pupil and should accordingly shorten very materially the period of time that a patient is ordinarily incapacitated following regular homatropine cycloplegia.

**SECTION B: Observations of the action of one-half of one per cent APL eserine made on ten physically healthy patients between the ages of fourteen and thirty years.**

The same problems present themselves in this study as in the study of the one per cent eserine made in Section A. The same procedure was followed and the materials used were the same with the exception that one-half of one per cent APL eserine was used instead of the one per cent.

#### RESULTS OBTAINED

Results are recorded in tabular form and available upon application to the authors.

#### COMMENTS ON RESULTS

1. On the size of the pupil: Following the administration of homatropine and benzedrine, the usual dilatation of the pupil was observed. There also occurred the same diminution of the pupillary size following the administration of the eserine that was mentioned and discussed in Section A.

2. On the reaction of the pupil to light: Following the administration of the homatropine and benzedrine, the pupils in all patients were inactive to light. There was a return of the reaction of pupillary response to light in five of the patients following the administration of eserine at the one-half hour, one hour, and three and one-quarter hour intervals. This reaction was similar to that previously observed in that the pupil constricted in the presence of light but did not dilate upon the withdrawal of the light.

Pupils in all patients were uniformly active five and one-quarter hours following the administration of eserine and this reaction was more nearly normal.

3. On the change in accommodation: Following the homatropine-benzedrine, complete cycloplegia was obtained in eight of the ten patients and the two showing incomplete cycloplegia each showed a complete cycloplegia in one eye and could not read better than J7 in the other eye. It would seem that for practical purposes, this could be considered complete cycloplegia in all patients.

Following the administration of the eserine, there was complete return of accommodation apparent at the end of one-half hour. This was followed by a moderate but definite diminution in accommodation, which was overcome five and one-quarter hours following the administration of the eserine.

#### SUMMARY

Homatropine and benzedrine in combination gave complete cycloplegia in eight of the ten patients and cycloplegia was sufficient to be considered complete for all practical purposes in the other two patients. One-half of the one per cent APL eserine overcame this cycloplegia and brought about a complete return of accommodation one-half hour after its administration. This action showed a definite tendency to wear off and was not as permanent or lasting as that observed following the administration of one per cent eserine.

#### CONCLUSIONS

Homatropine and benzedrine used in combination will produce complete cycloplegia in a high percentage of patients between the ages of fourteen and thirty. APL eserine one per cent and one-half of one per cent will overcome the homatropine-benzedrine cycloplegia promptly and restore the power of accommodation completely within one-half hour. No reactions or untoward symptoms were observed.

---

The annual Medico-Military Symposium, sponsored by the Kansas City Southwest Clinical Society and the Seventh Corps Area, United States Army, will be held at the Kansas City General Hospital, Kansas City, Missouri, March 28 and 29. This is a meeting devoted to medical subjects of military interest to which the entire medical profession is invited. The medical reserve officer will receive due credits which will apply on his advancement. Guest speakers will be Dr. J. Albert Key, professor of clinical orthopedic surgery, Washington University School of Medicine, St. Louis, Missouri, and Dr. Ovid O. Meyer, professor of medicine, University of Wisconsin School of Medicine, Madison, Wisconsin.



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

The regular mid-year meeting of the Council was held in Wichita on January 30 with a hundred per cent attendance in spite of a cold, dreary day. It was a helpful and constructive session, during which the various activities of the Society were discussed and further plans decided. The Chairman on Arrangements for the State Meeting, which will be held in Wichita in May, reported on the tentative plans for the meeting. His report promises a high type program which will be headed by the President of the American Medical Association, Dr. J. H. J. Upham, who will deliver both a scientific and economic address. I respectfully urge every member of the Society to make plans to attend this meeting.

The special session of the legislature is under way. If efforts are made only to amend the Sales Tax and Social Security Acts to make them more equitable and workable we may look for a short session. If other bills are introduced, especially if they have a political bearing, the session may continue for weeks. As doctors we are much interested in an equitable division of the sales tax money, and in workable plans for carrying out the purposes of the Social Security Act, particularly as it pertains to the care of the indigent classes. We should keep in touch with our senators and representatives so that we may help them with constructive legislation and oppose actively any plans which are detrimental to the health and well being of our commonwealth.

J. F. Gsell, M.D., President

---



---

## EDITORIAL

---



---

### HEALTH EDUCATION

The medical profession is on the offensive. The constructive spirit which has always characterized the scientific physician has never been more manifest than at the present moment. This is shown in the improved organization of medical societies, in the recent advance along the lines of medical education and in improved methods of training for the specialties. There is also a revival of interest in the tradition of the doctor as a teacher. It is recognized that if the public is properly prepared to accept scientific medicine the cultists and charlatans can be wholly cast out of the social scheme, and that this can be done through the education of the public.

A program of health education may be approached in several ways. National, state and county medical societies may carry on educational publicity in general and special fields through ethical advertising in the lay press, the radio and by furnishing public speakers for large and small assemblages. The public health services both national and state may place before the public a campaign of education in preventive medicine and public health.

Health supervision has become an accepted part of the public school program. In connection with this there may be added a definite plan, devised to prepare the minds of school children for the acceptance of scientific medicine. The teaching of history in high schools, colleges and adult education should include an orientation in medical history. The relation of medical science to social and cultural development may be presented in historical perspective which will show how scientific medicine has entered into the whole complex social and cultural evolution of society.

The lack of confidence in scientific medicine on the part of the public is due largely to the failure of the public to attain a scientific attitude of mind toward health and disease. Without direction of scientific minds the public will rely on magic and view without understanding the efforts of the medical profession to promote the health and well-being of the population.

### DUES

State and county Society dues for 1938 are due and payable.

Prompt payment of dues, we believe, is a duty which the physician not only owes to his organization but also to himself. Some important considerations in this connection are as follows.

The American Medical Association is now preparing information for its 1938 Directory. Unless a member's 1938 dues are reported to the American Medical Association by the state society prior to the closing date of that publication, the physician's name appears in the Directory in small type, indicating that he is not a member of his county medical society.

Likewise through the recent action of several insurance companies paid Society membership plays an important part in securing and continuing professional insurance. In addition to this, the Constitution of the Society provides that defense privileges cannot be extended to any physician whose dues are delinquent at the time an alleged malpractice action is claimed.

Lapse in membership also means that a member's name must be removed from the mailing list of the Journal and that he does not continue to receive bulletins, services and other facilities of the Society.

The collection of dues presents an important and difficult task for the secretary of your county medical society, who is already burdened with many duties incidental to organized medicine. You can assist your secretary materially in this regard, as well as protect yourself in the above cited instances, if you will forward your check to him without delay.

---

### CHEAP INSURANCE

With the large number of scarlet fever cases this winter, which seems to be more or less statewide, there are also a number of communities which are threatened with an epidemic of diphtheria. Some schools and public gatherings are being closed in an effort to prevent the spread of the disease, although the successful outcome of this method is questionable and is no longer recommended by health authorities. Physicians recommend a closer inspection



of suspects and their prompt isolation until a diagnosis can be made, and a strict quarantine after the disease appears. But all this is so unnecessary.

A diphtheria epidemic is one thing which throws no scare into the parents in Kingman county. They know that no schools are going to be closed because of it. They know that in their families there are going to be no pitiful wrecks from the after effects of the disease and they know they are not going to have to sit by the bedside of some helpless child and watch it slowly choke to death. It is a feeling of safety and security that cannot be measured and at the same time it is so cheap.

In 1926 every school child in this county was vaccinated against diphtheria. That has been followed every two years so as to immunize those who have become of school age. In these twelve years there has not been a death in the county from diphtheria. There have been only three cases and these were persons who had moved into the county and were not vaccinated. In these three cases, no one else took it because there was no raw material for the disease to attack.

The expense of this work has been paid by the county. Incidentally, the pay has never been anywhere near what it was worth and it was made possible only by the fine cooperation of the doctors in their eternal vigilance to prevent disease rather than cure it. Parenthetically, this little job is only an illustration of the fine sense of public duty which has characterized the medical profession throughout the pages of history.

When schools are closed, the teachers' salaries and most of the other expenses go on just the same. Putting aside all worry and dread which diphtheria brings into the homes, to say nothing about the after effects or perhaps death and looking at it only from the cold-blooded standpoint of dollars and cents, the closing of a school, churches and other public places for only a short time costs any community far more than the cheap insurance which is offered against it.—F. G. Cloud, *The Kingman Journal*, February 4, 1938.

The educated person is one who each day learns something new, and who thinks on something when he is not in school.—Dr. Donald A. Laird.

---

## EYE, EAR, NOSE & THROAT

---

### SQUINT

Byron J. Ashley, M.D.

Topeka, Kansas

Squint or strabismus is one of our most disfiguring afflictions. Besides the physical aspect, it has a far reaching effect on the mental state. Inferiority complexes may develop with attendant evil results. Adults will often admit a feeling of self-consciousness and seek darkly tinted glasses to conceal the disfigurement. There are very few people occupying positions of importance that have a squint.

There are a number of types of strabismus. Suffice it to say that eighty per cent of the most common type is amenable to treatment if seen early. It is the man in general practice who is consulted at the time when most could be accomplished and the best results obtained.

All have noticed the uncontrolled movements of babies' eyes. It is temporary, bilateral, varies in direction, and is not constant. Guibor calls this the physiologic deviation and is probably due to underdevelopment of the neuro-muscular mechanism. It is observed in the first year and a half of life. Donders calls it the "potential strabismus period."

A pathologic deviation usually starts after the age of a year and a half. It differs from the physiologic in that it assumes a more definite direction. At first it may be temporary, the eye turning in or out for only a short time or the fixing eye may alternate. As time passes, the strabismus becomes more frequent and in time constant, in which case one eye suppresses in order not to see double. Useful vision is lost in the non-fixing eye and it becomes amblyopic. One set of muscles shorten and a definite pathologic condition is present.

It is during the periodic stage that most can be accomplished, and it is this stage that in the past was so often passed by with the remark that "he will grow out of it". Perhaps he would, but the majority do not. This periodic stage, usually from one and one-half to three years of age, is when the child is beginning to use his eyes more for close work. The use of building blocks, handling dolls and other playthings call for the new process of accommodation and convergence. It may be that his neuro-muscular system has been weakened by some infection, and if he has some defect such as farsightedness, it is easy to theorize why there may be an in-coordination

of movements and one eye turn in with the resultant diplopia or suppression. These factors or predisposing causes, as Guibor calls them, are always present before the strabismus appears. As a rule the onset of the squint is gradual, usually for short periods at first. A child in this age group which shows unusual eye movements in a definite direction warrants attention. If it is determined that the deviation is of a pathological type, then treatment is indicated immediately. This diagnosis requires no special instruments or training, only the observation that the eye tends to deviate the same way each time.

Treatment at this stage is quite simple, it consists of atropinization or occlusion. In infants an 0.5 per cent atropine solution or ointment is placed in the straight eye once a month for several months. The mother may be instructed to use the atropine in the straight eye when she notices that one in squinting. This procedure will often overcome a convergent strabismus and preserve the vision in the non-fixing eye.

If no improvement is obtained, refraction using atropine and retinoscopy should be done. Atropine is used first for the dilatation so retinoscopy is easier and second to obtain relaxation so the full refractive error can be determined and prescribed. A full correction relieves the effort of accommodation and convergence and even stronger glasses may be used for close work at times. In addition to glasses, orthoptic training may need to be used, the length of time varying with the case.

Quoting Guibor again, he states "that thirty per cent of cases of strabismus can be corrected by refractions, atropinization and occlusion, and in about fifty per cent of cases by the above means plus orthoptic exercises."

## DIFFERENTIAL DIAGNOSIS OF EAR CONDITIONS

H. L. Kirkpatrick, M.D.

Topeka, Kansas

We speak, sometimes, of the simpler ear conditions. There we may roughly classify as; external otitis or furunculosis, cerumen impactions, otomycosis and the so-called eczematoid affairs, as the more important of these. About seventy-five per cent of the time their diagnosis offers little difficulty.

Furunculosis is usually associated with swelling of the external canal, pain on manipulation of the auricle and little or no disturbance of hearing. But we all see cases wherein all these things are present plus the fact that the swelling is high and behind the

auricle and the auricle stands out prominently, as it sometimes does in mastoiditis. At the same time the hearing is poor. The problem would not be quite so great if we did not have to consider the economics of the situation as the x-ray and a blood study will usually help us out. As long as we are not dealing with a patient seriously ill, a little patience and observation of developments will aid us and the diagnosis in a few days will be clear.

Otomycosis, as a rule offers no difficulty. The patient comes in complaining of earache of some severity and deafness. Examination of the external canal will reveal the typical fungus growth. The commonest type seen in the summer and fall has the typical coal dust particles present in the washings. Careful cleaning and drying with the frequent use of two per cent salicylic acid in ethyl alcohol effects a cure in the majority of cases. However, two cases are offered which demonstrate the occasional difficulties in diagnosis and treatment.

CASE 1. At first visit the diagnosis seemed to be plain. The material removed was typical aspergillus even to the coal dust particles. The pain and discharge continued. I felt sure there was something behind the layer of exudate which clung tenaciously to the eardrum. Three weeks later it finally came loose and a moderate sized perforation was seen. It cleared up in due time.

CASE 2. Similar picture history. Drum cleaned off at first visit and no perforation seen. Two weeks later ear filled again and this time when the debris was cleaned off a large inferior perforation was seen, almost too large to be missed at first examination. Seen two or three times in next six weeks. The discharge from ear rather copious at all times. No mastoid symptoms until she walked in one day with a facial nerve paralysis of the affected side. X-ray showed mastoid involvement and at operation necrosis found. Otomycosis found microscopically in tissue from mastoid cells. Recovery uneventful.

This brings us to cerumen or wax. Usually no difficulty is presented in diagnosis. Difficulty sometimes is found in removal, as anything from lacerations of external canal to eardrum damage can occur with the utmost of ease.

We also have seen herpes zoster oticus which is usually indicated by the vesicles, or if seen early, the severe pain before the vesicular eruption. The eczematous infections with itching canal are also seen. The skin of the canal and lobe may crack and ooze serum, presenting a very difficult problem.

---

"No profession is more exposed to the temptation to forget honor, humanity and kindness than is the medical profession; and there is none in which the exploitation of human suffering is easier. Yet there is none in which the temptation is more triumphantly withstood".—John St. Loe Trachey.



---

## CANCER CONTROL

---

### WHY A CANCER EDUCATIONAL PROGRAM†

C. C. Nesselrode, M.D.

Kansas City, Kansas

For the purpose of gathering information and testing public sentiment a New England group spent six months making a survey which included several hundred doctors and many thousand of the laity. The subject to be determined was the professional and lay reaction to the question of cancer education. The ultimate figures showed that only fifty-five per cent of the physicians were favorably impressed and of this fifty-five per cent only about twenty-five per cent were approaching the subject with any degree of enthusiasm. The remaining forty-five per cent were either indifferent or definitely opposed to the effort.

In contrast to the professional attitude there were slightly more than ninety-five per cent of the laity that were anxious for information, and urging that the effort be continued. The public is interested in the subject of cancer and is anxious to be told by the profession of the facts concerning cancer and of the latest developments both as to diagnosis and treatment. The relatively low professional enthusiasm and the actually high lay enthusiasm are both a challenge to the cancer committees of the various state societies.

The work of the Women's Field Army last spring is a splendid example of what can be accomplished by the determined effort of a comparatively few. The laity are now demanding to be told about diseases and especially about those diseases which in the past have been shrouded in mystery both by the physicians and laymen. Many men are reporting that since the effort of last year there has been a marked increase in the number of patients coming for a general physical check up. This is particularly true of the women patients. They are definitely interested in precancerous and early cancerous lesions.

This public interest has been awakened in part by a few enthusiastic medical men interested in the subject of cancer education. They have been more particularly awakened by numerous articles appearing in lay magazines, by announcements in public news reels and various other methods by which information is disseminated.

† The Committee on Control of Cancer has been kind enough to offer to contribute material for a frequent section on Cancer Control. The Editorial Board desires to acknowledge with appreciation this article, which is the first of the series.

The laity have a right to demand the facts concerning cancer. It has, during the past twenty years, advanced from eighth to second place as a cause of death and it is today one of the most important public health questions.

The only question for the medical profession to determine is shall we lead the laity in this educational campaign, will we supply the information they are determined to have? It would appear to me that the answer to this question is so obvious that it should not need discussion. However, with forty-five per cent of the profession not interested there is danger of the leadership, which is at present ours, being taken from organized medicine and placed in the hands of other groups.

The Committee on Control of Cancer of The Kansas Medical Society is assuming that the profession should not relinquish the leadership that is now ours in the cancer movement. Further, that if this work is to be well done our first job is to awaken the interest of the forty-five per cent of our profession that are not now interested. In the furtherance of this program the Committee has decided to publish a series of articles on cancer. The articles are to be written by members of the Kansas profession. These articles will be published a few each month until the subject is quite generally covered. Then the articles will be gathered together in a small brochure which will be distributed one to each member of The Kansas Medical Society.

In undertaking this work the Committee feels that there are two objectives to be attained. First, the articles should be of such a character that they will awaken a greater interest on the part of the individual members of the profession and should supply the type of information that is going to be asked for by the various members of the laity who are sure to consult them concerning some phase of the cancer problem. It is the two principles above that will guide the contributors in the preparation of their articles.

It is the hope of the Committee that this educational program should be an optimistic one, that the message to be carried to the public is one of hope and not despair, that cancer is a curable disease if recognized early and that what we need is not a new cure but the early application of the cures that we now possess.

The slogan of this campaign should be the statement so often repeated by Dr. Bloodgood, namely, that if every doctor, every nurse and every layman would utilize the information that we now have concerning cancer and would avail themselves early of the methods of treatment we now have, that we could at once reduce the mortality by fifty per cent.

The educational program naturally divides itself into two divisions. First, the education of the laity and secondly, the awakening of a greater interest on the part of the profession. The first of these two objectives is being taken care of by the club women through the organization and enrollment of the American Women's Field Army. The profession must be equipped to contribute their part to this organized group. It is to the latter of the two divisions that the Committee will direct most of their attention. We are attempting to awaken a greater interest on the part of the profession and to supply the profession with such information and encouragement as they may need to the end that the profession as a whole may avail itself of the opportunity and responsibility of leading in the education of this great group of women enrolled in the American Women's Field Army.

Believing in the statement of Dr. Bloodgood quoted above the Committee approaches this task with enthusiasm and with confidence that rightly carried forward the results are bound to be creditable to the profession and profitable to the public.

---

## TUBERCULOSIS CONTROL

---

### COMMITTEE FINDINGS\*

Henry N. Tihen, M.D.

Wichita, Kansas

The official actions of the Committee on Control of Tuberculosis of The Kansas Medical Society have been printed in this Journal from time to time; however, I wish to present the following personal impressions and opinions derived from contact with various phases of tuberculosis work as chairman of this committee. The Committee on Control of Tuberculosis is constituted so as to represent the medical profession, the Norton Sanatorium, the Tuberculosis Department of the State Board of Health, and the Kansas Tuberculosis and Health Association. There has been a sincere attempt in the committee to bring about a better understanding and a better cooperation between these four major organizations, all of which have a definite place in the tuberculosis work in the state.

When any study is made of tuberculosis it is soon apparent that there are many problems to be solved and that they can best be solved by the mutual co-

operation of all four of these above mentioned major agencies. These problems exist in practically every county in the state and it may be well to call attention to some of these more important problems, such as follows:

1. The development of adequate sanatorium facilities in the state for the care of all active cases without delay and the proper location of future sanatorium additions and facilities in the state.
2. The question of some state legal regulations of the contagious infective cases of tuberculosis who do not take adequate precautions against infection of others.
3. Adequate instruction to the public to present themselves to the physician in time for early diagnosis.
4. Arrangements in each county for facilities for checking up on the diagnosis on tuberculosis suspects in the indigent group and in the semi-indigent group. The group able to pay for their medical care will naturally go to their own physicians for check-up and present no real problem; however, the indigent and semi-indigent groups present a definite problem and facilities must be arranged for adequate clinical, laboratory, and x-ray check-up on these patients. Because of the danger to contacts it is especially desirable that the active case of tuberculosis be diagnosed early in these groups of patients and this presents a definite health problem that can be worked out satisfactorily in each county medical society with the other tuberculosis agencies named above.
5. The development and rendering available of suitable x-ray facilities. The x-ray will always be important in early diagnosis. Regular chest x-ray of all contacts should be encouraged and arranged for, as well as early x-ray in all tuberculosis suspects who come for diagnosis. Here the indigent should be taken care of through county funds and the semi-indigent may be cared for on a part-pay basis. The Kansas Tuberculosis and Health Association is willing and usually is in position to render financial assistance for part-pay arrangements for x-ray in the indigent and semi-indigent groups.
6. Tuberculin testing programs. These usually will yield the best results through cooperation of the county medical society and the State Board of Health, and both of these groups should be willing to cooperate with each other in this matter.
7. The development of suitable facilities in each county for pneumo-thorax therapy. This is especially desirable in order to give refills of

\* The Committee on Control of Tuberculosis has been kind enough to offer to contribute material for a frequent section on Tuberculosis Control. The Editorial Board desires to acknowledge with appreciation this article, which is the first of the series.



cases which have become non-contagious and yet which must have chest refills for long periods of time. These arrangements will permit non-contagious cases to be cared for at home by the family physician in many instances.

8. Arrangements for adequate milk supply to the indigent and semi-indigent cases of tuberculosis or of potential tuberculosis.

The lay public is becoming more and more cognizant of these problems and the medical profession should take the leadership in helping solve these problems in each county in cooperation with the other tuberculosis organizations.

With the approval of all the groups represented the committee passed the following resolutions:

1. The committee finds that there are several types of tuberculosis clinics in operation in various parts of the state, consisting of tuberculin testing clinics held by the State Board of Health, diagnostic clinics held by the Kansas Tuberculosis and Health Association, diagnostic and treatment clinics conducted by the county medical societies, and a diagnostic and treatment clinic at the Norton Sanatorium.
2. The committee further finds that some of these clinics are considered to be of definite value by the local medical profession; the committee also finds that some of the clinics have been so conducted as to be probably of very little value and have aroused considerable opposition on the part of the local medical profession.
3. The committee therefore neither opposes or urges the development of tuberculosis clinics throughout the state but believes that this is a matter to be determined for its own county by each local county medical society after consultation with the representatives of the local and state tuberculosis associations and the county and state health department.
4. The committee approves the holding of any tuberculosis testing, diagnostic, or treatment tuberculosis clinic which is approved by the local county medical society.
5. The committee opposes the holding of any tuberculin testing, diagnostic, or treatment tuberculosis clinic which is disapproved by the local county medical society.
6. This committee would urge the observance of the following details in any tuberculosis clinic now established or in any proposed tuberculosis clinic:
  - (a) That it be approved by the local county medical society;
  - (b) That in addition to being approved by

the local county medical society, it would be desirable for it to be supervised by a committee of the local county medical society working with any other organization interested in the clinic;

- (c) That the clinic be held at regular intervals;
- (d) That the clinician or clinicians working in the clinic be chosen by the local county medical society;
- (e) That the question of fees, admittance of patients, and all similar details be approved by the local county medical society.
7. Local publicity for any clinic work should be endorsed equally by the local medical society and by any other groups assisting in the clinic work.
8. This committee believes that the leadership in the tuberculosis, as well as in all other medical problems, belongs primarily in the hands of the medical profession and their organized societies, but that the medical society should extend proper cooperation to other recognized agencies in this field, and in turn will expect proper cooperation from these other agencies.
9. This committee further agrees to act as a liaison agent to promote better cooperation between the county medical societies, the Tuberculosis Department of the State Board of Health, the Kansas Tuberculosis and Health Association, and the Norton Sanatorium.

These resolutions pave the way for cooperation of all the agencies to work together with a minimum of misunderstanding. This gives each county medical society not only the opportunity but also the duty of actively attacking the tuberculosis problem in its own county. To maintain this leadership the county society must be willing to study the problem, usually through a committee, and to work in cooperation with the other tuberculosis agencies, each of which has its own place, and this mutual cooperation will react to the benefit of all.

As stated above, interest in tuberculosis is widespread among the lay public and this entails active work by the county medical societies in cooperation with the other tuberculosis agencies to maintain medical leadership and to develop the soundest policies in the field of tuberculosis. This cannot be accomplished by a negative attitude.

---

The expectations of life depend upon diligence. The mechanic who would perfect his work must first sharpen his tools.—Confucius.

---



---

## MEDICAL ECONOMICS

---



---

### CORRESPONDENCE

Although every doctor carries on more or less correspondence in the course of his professional work, probably few have given much thought to the effectiveness of the letters written. Ordinary skill in letter writing demands more than anything else the "human touch," or putting yourself in the place of the person receiving the letter, so that your message will gain the desired results with the same sincerity and directness you would use were you talking to the man in person.

#### IMPRESSIONS

Letters over your signature to firms you are dealing with, patients, friends and other doctors are, in a manner of speaking, your messengers and carry very definite impressions of you. Style and quality of stationery and neatness of appearance, as well as the tone of the letter, reflect your attention to detail and your personality just as truly as do your personal contacts, and too much care cannot be given to this phase of your business. Many times in the press of professional duties correspondence is neglected and opportunities for cementing friendships, as well as making money, are passed up.

#### REFERRED CASES

For instance, you know how much you appreciate it when a doctor to whom you have referred a patient, promptly drops you a line thanking you and telling you what his diagnosis is, and his plans for treatment. Not only is this the courtesy you have reason to expect, but it is also the best possible insurance that you will refer more cases when possible. Neglect of this same thoughtfulness when patients are referred to you ruins more possibilities of referred work than you can imagine, and on the other hand an established routine of always doing this will make you many friends among the profession. Your office nurse can make it a routine to bring to your attention every such case, and the time involved usually need not be long.

#### COURTESY LETTERS

Don't you suppose one of your patients who sends a friend in to your office would be pleasantly surprised to receive a note thanking him, and assuring him you will do everything you can to justify his recommendation? And is it not likely that he will seek an opportunity to do it again more surely than if you had apparently ignored his effort! Cer-

tainly! And the few minutes you spent thanking him will pay big dividends.

#### COLLECTION LETTERS

Similarly, collections need not be a "bugbear" if you take time to talk the situation over by letter with the "slow" patient. Try to place yourself in the patient's position and write to him just as courteously as you would talk to him about the matter. You know there is some misunderstanding if he has not responded after two or three statements. One of three things is probably wrong: First, the patient thinks something was wrong with the service, in which case a prompt contact is important; second, payment is difficult, and a gradual but steady liquidation should be arranged; or third, and most probable, he is just dilatory, and a courteous reminder is necessary to get his attention. In any case a personal letter offers the best possibility of amicable adjustment. But remember this, get the *patient's point of view* and approach the problem from his angle as well as yours. If you can impress the patient with your interest in helping him to take care of the obligation your results are assured. "Soft pedal" the obvious interest you have in improving your own collections. For instance, here is a typical example of a bad approach:

Dear Mr. Jones:

As I have some heavy obligations to meet this month I would appreciate your taking care of this account.

Sincerely,

Dr. Blank,

What is the patient's reaction? Why, he says to himself, "What does that Doctor know about obligations? He has a lot more money than I have."

No one consciously provokes a reader; the trouble is we forget him. Contrast an approach like this:

Dear Mr. Jones:

I know that medical bills often come unexpectedly and do not fit into the family budget, and I want to help all I can, so if you will just let me know the situation I am sure we can make arrangements that will help us both. Thanking you in advance for your cooperation, I am

Sincerely,

Dr. Blank.

Is not such an appeal much more likely to get the money, keep a patient, and make a friend? If your letter is ignored as often it will be, the same interest in the patient's problems should be emphasized in further correspondence. Showing irritation at the patient's evident neglect only makes a bad matter worse.



## IT PAYS

Thoughtful attention to such little details as appearance, reality, and consideration in handling your correspondence will certainly have a tendency to widen your circle of friends both within the profession and outside, and is likely to pay big dividends in actual money as well.—Henry C. Black and Allison E. Skaggs, *Journal Michigan State Medical Society*, June, 1937.

---



---

## NEWS NOTES

---



---

## INDIGENT CARE

The Indigent Medical Care Committee of the Kansas State Board of Social Welfare, composed of representatives of county commissioners, county welfare directors and the Society, met in Topeka on January 21.

Major points of discussion at the meeting pertained to the future handling of indigent medical care in the state. Consensus was general among the representatives of the county commissioners and the county welfare boards that present indigent service is good; that Kansas physicians have cooperated to the fullest degree in the handling of this problem; that they have done so mainly without sufficient financial assistance from the various counties; that county welfare boards should assist the medical profession wherever possible; that there is need for standardization throughout the state for financial allowances for indigent medical care; that the county medical society plans probably afford the best means for settlement of the problem; and that to date satisfaction to all parties concerned has seemed to follow the lump sum and controlled fee schedule types of methods.

Approval was given that the Research Department of the Kansas State Board of Social Welfare and representatives of the Society should prepare a questionnaire for release to the counties wherein detailed costs of indigent medical care and present plans in existence could be ascertained. Decision was also made that upon receipt of this information, the committee should hold another meeting with a view toward preparing recommendations in this connection.

The representatives of the Society who attended the meeting were greatly impressed with the interest and knowledge the group displayed concerning this problem. It is their opinion that many practical possibilities will result from the present joint and cooperative study of this subject.

---

## POSTGRADUATE COURSES

Dr. F. P. Helm, Secretary of the Kansas State Board of Health announced recently that a grant had been received from the United States Public Health Service wherein post-graduate courses may be presented to the Kansas medical profession on the subjects of cancer, venereal disease and tuberculosis.

It is planned that two day courses on each of these sub-

jects will be offered to doctors of medicine in each of the councilor districts during the next six months.

The program will be sponsored jointly by the Kansas State Board of Health and the Society.

Plans for the courses are now being prepared by Dr. Helm, the Committee on Control of Tuberculosis, the Committee on Venereal Disease and the Committee on Control of Cancer.

---

## BLIND TREATMENT

Dr. C. J. Mullen, State Ophthalmologist, has completed arrangements for a program wherein blind assistance clients of the Kansas State Board of Social Welfare will receive indicated medical and surgical treatment.

The program, which will be announced in the near future, will include free choice of ophthalmologists for medical and surgical conditions of the eye; free choice of any other doctor of medicine for systemic conditions affecting the eyes; free choice of approved hospitals; drugs, appliances and all other needed services.

Fees will be paid from state and federal Social Security Act funds.

---

## DISTRICT MEETINGS

The following councilor district meetings were held during the past month: First District—Horton, January 16; Second District—Lawrence, January 16; Seventh District—Concordia, January 23; and Eighth District—Salina, January 23.

Speakers at the meetings were Dr. E. C. Duncan, Dr. R. T. Nichols, Dr. R. W. Urie, Dr. L. L. Bresette; Dr. F. L. Loveland, Dr. W. M. Mills, Dr. D. R. Davis and Clarence G. Munns. Organization matters were discussed.

Additional district meetings for the Fifth, Sixth, Ninth, Tenth, Eleventh and Twelfth Districts are to be announced within the near future.

---

## CANCER BROCHURE

The Committee on Control of Cancer is assembling scientific information which is to be compiled into a brochure on cancer.

The plan of the brochure is that selected articles pertaining to the diagnosis and treatment of malignant disease will be approved by a sub-committee of the cancer committee; that the articles will be published in consecutive issues of the *Journal*; and that following publication in the *Journal* the articles will be compiled in pamphlet form for distribution to members of the Society.

The first article is presented on page 64 of this issue of the *Journal*.

---

## LAY EDUCATION

The Committee on Conservation of Eyesight has recently completed a series of twelve pamphlets describing in lay terms conditions of the eye.

The pamphlets will be published by the Division of the Blind of the Kansas State Board of Social Welfare and will be distributed to the school children of Kansas.

## HALL OF HEALTH

The Hall of Health is under way. The success of the exhibition to be held in the Wichita Forum from May 7 to 16 has been further advanced by the assurance that the Camp Transparent Woman will be on hand to reveal her anatomical secrets to an inquisitive public.

Though the Hall of Health is nominally a project of the Sedgwick County Medical Society, it is in reality an opportunity for Kansas medicine to show Kansans that their health is in good hands under the present medical system. It offers the first real chance for medicine to advertise itself in a legitimate way to the lay public.

Other equally worthwhile and interesting exhibits and displays are certain. The American Medical Association has promised six mechanical attractions which were used with such great success at the Milwaukee Hall of Health. The State Board of Health, the University of Kansas Medical School and the Sedgwick County Dental Society have asked for four or five booths apiece. Many other state and local organizations have asked for the privilege of demonstrating to the public their various health activities.

The Forum arena, or city auditorium, will be completely taken over by the Hall during the ten days. Floor plans call for fifty good sized display booths where the lay public can see and hear about the modern methods of health protection.

This will not be a dull wax-works show but a live, entertaining, educational exhibition which should be viewed by fifty thousand people. It is an opportunity for organized medicine to sell itself to the public. Kansas medical men should see that their patients and friends are informed of this painless, inexpensive opportunity to acquaint themselves with the interesting phases of health. It is painless because it is first of all entertainment; it is inexpensive because the admission has been set at one dime in order that everybody may be able to visit this unique attraction.

Progress is also being made on numerous other arrangements for the 79th Annual Session in Wichita. The scientific program, which is almost complete, will include a large number of nationally known guest speakers. An attempt is also being made to compile a program which will be of interest to every practicing physician in the state. The scientific exhibits will be the most complete in the history of the Society. Approximately forty technical exhibits have been reserved to date. Many new activities will be included in the meeting.

## LIBRARY BOOKS

Barton County Medical Society and Pratt County Medical Society have announced recently that they have completed arrangements to present a considerable number of medical and public health books to public libraries in Hoisington and Pratt.

The books are to be purchased from school and public library funds and selection of the books is to be made by committees of the above county medical societies.

## INCOME TAX

Federal Income Tax is due and payable on or before March 15. State Income Tax is due and payable on or before April 15.

## HIXON LABORATORY

The University of Kansas School of Medicine announced recently that it had received an additional grant of \$45,000.00 from the Hixon Foundation for completion of the Hixon Research Laboratory.

The Hixon Research Laboratory was erected approximately one year ago at a cost of \$61,500.00, \$25,000.00 of which was contributed by the Foundation and the remainder from existing funds and grants by the Public Works Administration. The recent contribution will enable the University to complete and furnish a four story building for the unit. The Laboratory is devoted entirely to medical research.

## MEDICAL ECONOMICS COURSES

Dean H. R. Wahl, of the University of Kansas School of Medicine, announced recently that the medical school would present a series of lectures on medical economics and the art of medical practice to senior students. The following Kansas physicians will present portions of the course: Dr. D. C. Peete, Kansas City; Dr. T. C. Kimble, Miltonvale; Dr. C. B. Francisco, Kansas City; Dr. E. M. Ireland, Coats; Dr. F. L. Loveland, Topeka; Dr. H. L. Chambers, Lawrence; Dr. N. E. Melencamp, Dodge City; Dr. H. N. Tihen, Wichita; Dr. Fred Angle, Kansas City; Dr. F. J. McEwen, Wichita; Dr. C. A. Gripkey, Kansas City; Dr. W. H. Algie, Kansas City; Dr. Chas. Hassig, Kansas City; and Dr. H. L. Snyder, Winfield.

## TOUR

The following is a description of an all-expense tour which is being offered by the American Express Company to physicians who will attend the next American Medical Association meeting in San Francisco:

"The thought that the forthcoming A.M.A. Convention in San Francisco, June 13 to the 17 is such a splendid opportunity for a tour of the United States both going out and coming back, has inspired definite action. The co-operation of more than 25 state medical societies has made it possible to arrange a special train tour which will include such outstanding highlights of the North American continent as the Indian Detour, the Grand Canyon, Los Angeles, Riverside and Santa Catalina Island—on the way out to San Francisco. A choice of two return routes are possible, one of which visits the charming cities of Portland, Seattle, Victoria and Vancouver and the beautiful scenic spots of the Canadian Rockies; the second route travels via Yellowstone National Park, Salt Lake City, Royal Gorge, Colorado Springs, and Denver.

"There is an all-inclusive price for this tour which includes transportation from home-town to home-town, though the tour starts officially at Chicago on Monday, June 6, from which point an American Express escort joins the group, as this travel company has been appointed transportation agent and the business details of the trip are in their capable hands.

"Let us take a preview of the tour. The first day out of Chicago, racing across the broad, wheat-growing face of Kansas, we become acquainted with our traveling companions, physicians from other states, their families and friends, and find ourselves among congenial, like-minded traveling companions. We first leave our train at Lamy, New Mexico, to enter the Indian Pueblo district by motor-coach. We spend a whole day exploring the traces left by



a vanished civilization on this continent, visiting Santa Fe, Tesuque, Puye and Santa Clara Pueblo.

"The next morning's arrival at the Grand Canyon will remain in our memories forever. The vast chasm, four to eighteen miles wide from rim to rim gives us stupendous vistas of awe-inspiring beauty, unparalleled the world over. We drive over the famous Hermit Rim Road, skirting the edge of the chasm in the morning, and in the afternoon over the Desert View Road through the Tusayan National Forest and along the Canyon's rim, stopping at Yavapai Point Observation Station for a short, interesting lecture by the Park Naturalist. This drive ends at the Watch Tower, a recreation of the ancient towers erected by the prehistoric inhabitants of the southwest.

"The golden, amazing city of Los Angeles is next on our itinerary, and our sightseeing trips acquaint us with its Spanish Quarter and Chinatown, as well as its beautiful environs, including flowering Pasadena. Riverside and its orange empire, its lemon and grapefruit orchards and its famous Mission Inn, is another destination; and then, on our third day in California we sail to beautiful Santa Catalina Island, playground of this land of the sun. And in this delightful manner, a week after leaving Chicago we arrive at San Francisco in time for the Convention. We shall not discuss the interesting time that awaits us at our conclaves, as the object of this article is to describe the pre and post-convention tour. So we turn again to our itinerary after the Convention.

"Supposing we had chosen Return Route No. 1. We shall visit Portland, Oregon, famed as the city of roses, and enjoy as well a drive along the noted Columbia River Highway. Seattle is next, and here we also cover all the points of interest, including both the Lake and Sound districts. Now the Canadian part of our journey begins, and we sail by comfortable steamer to the cities of Victoria and Vancouver, where we do sightseeing. Now a train takes us into the enchanting scenic regions of the Canadian Rockies, and we stop at Chateau Lake Louise, at the lake of the same name—a gem of exquisite color, surrounded by green forests and snowy peaks. Our drives through the heart of the Rockies takes us to Moraine Lake, the Valley of Ten Peaks, Johnson Canyon and finally to Banff, where we make another stopover. After additional sightseeing around Banff, we entrain for Chicago.

"Return Route No. 2 takes us to Chicago in a more southerly route. A three and one-half day tour of Yellowstone National Park is one of the highlights of this tour. Ranger naturalists conduct our party to the geysers and hot pools, and we feast our eyes on Old Faithful in its hourly eruption. We also see the Grand Canyon of the Yellowstone and Mammoth Hot Springs. Salt Lake City is on our itinerary, which gives us an opportunity to visit Saltair Beach on Great Salt Lake, also the Great Copper Mills and Smelters. Our next call is at Colorado Springs, the noted health and pleasure resort. Our travels in the Rockies take us up to the summit of Pikes Peak, to the Garden of the Gods, to Seven Falls, and finally to Denver. This lovely city is a center for outings in the Rockies, and we are soon off on a sixty-five mile tour of Denver Mountain Parks, including Memorial Museum and Tomb of Buffalo Bill of western fame. From Denver we travel to Chicago.

"The above is barely a glimpse of the outline of the tours, but it is hoped that some idea has been given of the enjoyable travel awaiting those physicians and their families and friends, who wish to combine attendance at the Convention with an interesting journey and a happy vacation."

The tour will be open only to physicians and their families. Additional information may be obtained from Mr. H. C. Templeton of their Kansas City office.

## NEUROPSYCHIATRY COURSE

The medical staff of the Menninger Clinic will conduct its fourth annual Postgraduate Course on Neuropsychiatry in General Practice, April 25 to 30, inclusive, at the Menninger Clinic, Topeka, Kansas. The course this year will include a brief introduction to the fields of neurology and psychiatry and a specific application of this knowledge to the large group of cases of psychoneuroses, psychoses and psychogenic and neurological disorders which every physician meets in his daily practice. Suggestions made by those who took the course last year have been embodied in this year's program in order to make it applicable to the most common practical problems of the physician.

As in previous years, several guest speakers, prominent in the fields of neurology and psychiatry, will appear at the evening sessions of the course.

## 1938 TRAP AND SKEET MEET

The Kansas Medical Trapshooting Association has announced the following plans for the 1938 meet which is to be held at the Wichita Gun Club (west of Wichita on Cannonball Highway) on May 9:

### TRAP

100 16 yard targets shot in 4 events, \$2.00.  
12 pairs of doubles, shot in 1 event, .50.

### SKEET

100 skeet targets, shot in 4 events, \$2.00.

### OPTIONS

Options on skeet and traps, 50 cents on each 25 targets; 50 cents on 12 pairs of doubles. Options divided in 4 equal moneys on each 25 targets on traps and skeet.

Total options on program, \$4.50.

### RIFLE SHOOTING

.22 caliber Rim-fire any kind of gun or any kind of sights.

10 shots at 50 yards, prone 10 shots at 50 yards. Standing-free rifle position, \$0.25.

### PISTOL SHOOTING

20 shots at 20 yards, fired on 2 targets, \$0.25.

### TROPHIES

1 trophy for the 225 targets (100 skeet, 100 trap and 12 pair doubles. 1 trophy for first place and 1 trophy for second place on 100 trap targets. 1 trophy for first place and 1 trophy for second place on 100 skeet targets. 1 trophy for first place and 1 trophy for second place on 12 pairs doubles. 1 trophy for first place and 1 trophy for second place in rifle shooting. 1 trophy for first place and 1 trophy for second place in pistol shooting.

### TEAM MATCHES

We will have a four-man team race on 100 trap targets and the same on the 100 skeet targets. The four men constituting the team, must belong to the same county society. The team race will be decided on the 100 sixteen yard targets and on the 100 skeet targets. A Wichita Gun Club medal will be given to each man of the winning team.

## Cook County Graduate School of Medicine

(In Affiliation with Cook County Hospital)  
Incorporated not for profit.

### ANNOUNCES CONTINUOUS COURSES

**MEDICINE**—Informal Course; Intensive Personal Courses; Special Courses.

**SURGERY**—General Courses, one, two, three and six months; Two Weeks' Intensive Course in Surgical Technic with practice on living tissue; Clinical Course; Special Courses.

**GYNECOLOGY AND OBSTETRICS** — Diagnostic Courses; Clinical Courses; Special Courses.

**FRACTURES AND TRAUMATIC SURGERY**—Informal Practice Course; Ten-day Intensive Course starting Feb. 14, 1938.

**OTOLARYNGOLOGY** — Two Weeks' Intensive Course starting April 4, 1938.

**OPHTHALMOLOGY**—Two Weeks' Intensive Course starting April 18, 1938; Personal Course in Refraction.

**UROLOGY**—General Course, two months; Intensive Course, two weeks; Special Courses.

**CYSTOSCOPY**—Ten-day Practical Course.

General, Intensive, and Special Courses in all Branches of Medicine and Surgery.

### TEACHING FACULTY—ATTENDING STAFF OF COOK COUNTY HOSPITAL

Address: Registrar, 427 South Honore Street,  
Chicago, Illinois.

## Ambulance Service

To which you may  
trust your most  
gravely ill patient

•

NEW AMBULANCES

TWO TRAINED ATTENDANTS

•

*Rates: 15c a mile to any point in Kansas—  
everything included*

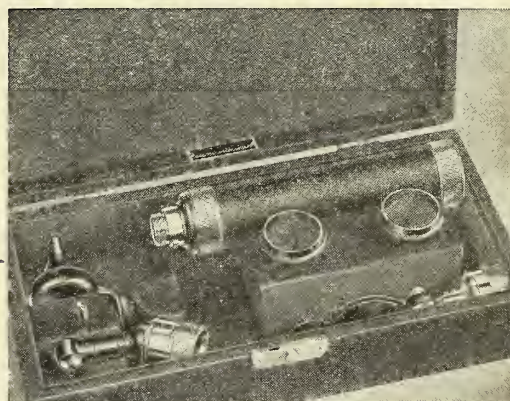
WALL-DIFFENDERFER  
MORTUARY

Topeka,  
Kansas.

723 West 6th  
Phone 3-2326

## MODERN DIAGNOSTIC SETS

*for eye, ear, nose  
and throat work*



One of the most popular combinations of AO diagnostic instruments consists of the new AO May Ophthalmoscope and the Prism Otoscope.

The new May Ophthalmoscope is equipped with an illuminated dial that makes dark room examination a simple matter. It is hooded so that the light does not interfere during the examination of the patient's eyes. The Prism Otoscope gives the ideal illumination for operation and general diagnosis, permitting unobstructed observation along the beam of illumination without reflection.

Also, no part obstructs the introduction and manipulation of instruments.

Arrange for a demonstration of AO diagnostic instruments. Your American Optical representative can help you select the set best adapted to your requirements.



# AMERICAN OPTICAL COMPANY



There will be a two-man team race on the 100 sixteen yard targets and on the 100 skeet targets. The two men composing the team must be from the same town. There will be a trophy for each man in the winning team; this team race will also be decided on the original 100 targets at skeet and trap.

Neither of the above team races are required to shoot both trap and skeet. The skeet races and the trap races will be separate.

Note: It is not necessary for any man to shoot the options to win any of the trophies.

#### SIMON PURE MATCH

This constitutes any man that is known to have never fired skeet or traps. There will be a trophy for the man making the highest score on twenty-five targets at skeet and also at traps during the day.

#### SAN FRANCISCO A.M.A. MEETING

Members should write today if they contemplate attending the American Medical Association meeting in San Francisco this June and obtain their hotel reservations. See recent issues of The Journal of the American Medical Association giving list of San Francisco hotels and rates. Send in your requests to Doctor Frederick C. Warnshuis, 450 Sutter Street, San Francisco, California, giving names of members of your party, type of accommodations desired, rates, date of arrival and departure.

The San Francisco Session promises to be an outstanding one by reason of the scientific program, scientific and technical exhibits and the social functions. In addition, there is the lure of California with its scenic beauty, majestic mountains, fertile valleys and historical background. An opportunity presents to combine profit of the program with the pleasures of visiting San Francisco, the Golden Gate City with the two bridges, engineering wonders of the world.

Come by train, boat, auto or plane—no matter how—but come. Your visit will ever be one of pleasant memory. San Francisco and the bay area medical profession anticipate the pleasure of being your hosts and cordially invite you to come to the San Francisco Meeting.

Watch the Journal of the American Medical Association for program features and events.

#### RESIGNATION

The Board of Administration recently announced that Dr. Phillip Cohn had resigned his position as a member of the staff of the State Sanatorium for Tuberculosis at Norton.

#### COUNCIL MINUTES

A meeting of the Council of The Kansas Medical Society was held in Wichita on January 30. Officers and Councilors present were: Dr. J. F. Gsell, President, Wichita; Dr. N. E. Melencamp, President-elect; Dr. R. T. Nichols; Dr. L. F. Barney; Dr. L. D. Johnson; Dr. J. L. Lattimore; Dr. Marion Trueheart; Dr. W. P. Callahan; Dr. F. R. Croson; Dr. L. S. Nelson; Dr. C. D. Blake; Dr. Walter Stephenson; Dr. A. C. Armitage; and Dr. Geo. O. Speirs. Other members present were: Dr. C. C. Nesselrode, Chairman, Committee on Control of Cancer; Dr. F. L. Loveland, Chairman, Committee on Medical Economics; Dr. H. L. Snyder, Delegate; Dr. G. B. Morrison,

President, Sedgwick County Medical Society; Dr. A. W. Fegty, Chairman of Technical Exhibit Committee for 1938 state meeting; Dr. F. J. McEwen, General Chairman of the 1938 state meeting; Dr. Geo. Gsell, Publicity Chairman of 1938 state meeting. Mr. John F. Austin, Executive Secretary of the Sedgwick County Medical Society; and Clarence G. Munns, Executive Secretary were also present.

The meeting was called to order by Dr. J. F. Gsell.

First order of business was a brief oral report by the Executive Secretary which included the following information:

Paid membership of the Society for 1937.....	1,441
Honorary membership of the Society for 1937.....	52

Total membership.....	1,493
Remittances to Dr. Geo. M. Gray, Treasurer, during the year (including four 1936 dues at \$8.00 each).....	\$13,198.00
Balance on hand to be remitted.....	1,217.16
Accounts receivable .....	36.00
Check charges .....	.84

Total dues remittances.....	\$14,452.00
-----------------------------	-------------

#### Expense Report:

Income for January 1, 1937 to January 1, 1938	\$14,416.00
Expense for January 1, 1937 to January 1, 1938	
General Fund .....	\$11,844.29
Defense Fund .....	1,809.34

Total .....	13,653.63
-------------	-----------

Earned Surplus for Year.....	\$ 762.37
Budget report: (May 1, 1937 to January 1, 1938)	
Budgeted Income for 1937-38.....	\$14,425.00
Total Budget for May 1, 1937 to May 1, 1938 .....	12,585.00

Budgeted Surplus for May 1, 1937 to May 1, 1938 .....	1,840.00
Budget Surplus to date.....	\$ 1,315.00

Exceed budget to date.....	\$ 525.00
Journal report: (January 1, 1937 to January 1, 1938)	
Expense for Year:	

#### Direct

Printing .....	\$3,335.05
Engraving .....	219.46
Mailing and delivery Jrls. ....	132.00
Drayage .....	9.00
Salary Jrl. Assistant .....	684.00

\$4,379.51

Miscellaneous .....	207.61
---------------------	--------

Total Expense for Year.....	\$4,587.12
-----------------------------	------------

#### Income for Year:

#### Advertising

CMAB Accounts ....	\$2,545.54
Journal Accounts....	1,378.35
CMAB Rebate .....	325.11

\$4,249.00

#### Other Income

Special ads in April issue .....	279.25
----------------------------------	--------

# It Can Happen Here



*Example of severe rickets in a sunny climate. Courtesy of E. H. Christopherson, M.D., San Diego, and of "California and Western Medicine."*

**L**EST WE FORGET—we who are of the vitamin D era—severe rickets is not yet eradicated, and moderate and mild rickets are still prevalent. Here is a white child, supposedly well fed, if judged by weight alone, a farm child apparently living out of doors a good deal. This boy was reared in a state having a latitude between 37° and 42°, where the average amount of fall and winter sunshine is *equal to that in the major portion of the United States*. And yet such stigmata of rickets as *genu varum* and the quadratic head are plain evidence that rickets does occur under these conditions.

How much more likely, then, that rickets will develop among city-bred children who live under a smokepall for a large part of each year. True, vitamin D is more or less routinely prescribed nowadays for infants. But is the antiricketic routinely administered in the home? Does the child refuse it? Is it given in some unstandardized form, purchased from a false sense of economy because the physician did not specify the kind?

A uniformly potent source of vitamin D such as Oleum Percomorphum, administered regularly in proper dosage, can do more than protect against the gross visible deformities of rickets. It may prevent hidden but nonetheless serious malformations of the chest and the pelvis and will aid in promoting good dentition. Because the dosage is measured in *drops*, Oleum Percomorphum is well taken and well tolerated by infants and growing children. Rigid bioassays assure a uniform potency—100 times the vitamins A and D content of cod liver oil\*. Oleum Percomorphum, moreover, is a natural product in which the vitamins are in the same ratio as in cod liver oil\*.

\*U.S.P. Minimum Standard

Oleum Percomorphum offers not less than 60,000 vitamin A units and 8,500 vitamin D units (U. S.P.) per gram. Supplied in 10 and 50 c. c. brown bottles, also in 10-drop soluble gelatin capsules, each offering not less than 13,300 vitamin A units and 1,850 vitamin D units, in boxes of 25 and 100.

**MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA, U.S.A.**

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons



Subscriptions .....	69.00	
Cuts Sold .....	15.30	
		363.55
Total income for Year.....		\$4,612.55
Surplus for Year 1937.....	\$	25.43
Standing of Journal Funds: (As of January 1, 1938)		
Assets:		
Cash on Hand.....	\$1,022.15	
Cash at Post Office.....	14.09	
		1,036.24
Total Cash .....		\$1,036.24
Other Assets, Good Accts. Receivable		
Advertising .....	\$	20.25
Slow Accts. Receivable.....		71.00
Due Bill .....		26.00
		117.25
Total Assets.....		\$1,153.49
Liabilities:		
Accounts Payable .....	None	
Surplus .....	\$1,153.49	

Total Liabilities..... \$1,153.49

The Committee on Hospital Survey presented a proposal that the Kansas Hospital Association be extended an invitation to hold its annual sessions at the same time and place as the Society annual sessions. Upon motion by Dr. Lattimore, seconded by Dr. Barney and carried, it was agreed that an invitation of this kind should be extended to the Kansas Hospital Association.

General plans for the program of the 79th Annual Session of the Society were presented by Dr. Callahan and other members of the Sedgwick County Medical Society. Upon motion by Dr. Callahan, seconded by Dr. Trueheart and carried the plans of Sedgwick County Medical Society for the meeting were approved and an appropriation of Society funds in the amount of \$600.00 was made to assist in defraying expenses with the understanding that if any of this fund is not needed, the excess will be returned to the Society treasury.

Dr. F. L. Loveland, Chairman of the Medical Economics Committee, presented a report concerning a meeting held in Topeka on January 21 wherein representatives of the State Board of Social Welfare, county boards of social welfare and The Society discussed indigent medical care. It was moved by Dr. Nichols, seconded by Dr. Lattimore and unanimously carried; that the Council does hereby approve the work of the Committee on Medical Economics; that it authorizes the Committee on Medical Economics to recommend variations of lump sum and fee schedule methods as workable plans for indigent medical care in the state of Kansas; that it further authorizes this committee to suggest a fair price as a basis of compensation for physicians providing indigent medical care.

A letter from Dr. R. C. Williams, Medical Director of the Farm Security Administration which outlined a proposal for medical care of Kansas Farm Security Clients was read. It was moved by Dr. Nichols, seconded by Dr. Blake and carried that the matters of Farm Security Administration medical care be referred to the Committee on Medical Economics for further consideration.

Dr. C. C. Nesselrode, Chairman of the ommittee on Control of Cancer described a project wherein his com-

mittee proposes to publish a brochure on diagnosis and treatment of cancer for use by members. He requested permission of the Council to publish the brochure and asked for its guidance as to whether the names of individual authors should be published therein. Upon motion by Dr. Barney, seconded by Dr. Nichols and carried, the committee was authorized to proceed with this project and to publish in the brochure the names of all contributing authors.

Dr. Nesselrode then presented a recommendation of this committee that it be permitted to purchase several film strip projectors which could be made available for loan to county medical societies. It was moved by Dr. Barney, seconded by Dr. Johnson and carried that the committee be authorized to purchase two projectors for this purpose.

The possibility of special train cars for Kansas members to the San Francisco A.M.A. meeting was discussed. It was decided to have the central office bulletinize the county medical societies to determine the number of members who would be interested in such a trip.

The question of acceptance of out-of-state members in the Society and several problems incidental thereto was presented. Upon motion by Dr. Nelson, seconded by Dr. Croson and carried, it was agreed that the present policy concerning out-of-state members should be continued but that all members of this kind should be notified that they can not be extended defense protection unless they reside in the state of Kansas.

The Editorial Board asked for the instruction of the Council as to whether it should accept advertisements of lay laboratories and out-of-state clinics. Upon motion by Dr. Blake, seconded by Dr. Callahan and carried, a recommendation was made that The Journal should not accept advertisements of this kind.

Applications from Jefferson and Barber Counties for county medical society charters were approved upon motion made by Dr. Armitage, seconded by Dr. Trueheart and carried.

A question was presented as to whether the Society should enter into a contract with Dun and Bradstreet, Inc., for the purpose of obtaining investigative reports. The Executive Secretary recommended that this be done and also that Dun and Bradstreet, Inc., be requested to furnish the President, Secretary, and Treasurer financial reports of the Society and the Executive Secretary bi-annually. Upon motion by Dr. Lattimore, seconded by Dr. Croson and carried, both of these recommendations were approved.

Upon request of the State Board of Administration, the Council discussed a plan suggested by the Board wherein a resident intern and a staff of part-time consultants would be employed to furnish medical services for inmates at the Lansing State Prison. Upon motion by Dr. Nichols, seconded by Dr. Lattimore and carried the plan was unanimously approved.

Dr. Gsell asked the Council whether it felt councilor district meetings similar to the present ones being held, should be continued. Consensus was general that meetings of this kind should be held as often as possible.

The question was presented as to whether the Society should purchase a copy of the American Medical Association motion picture on "Syphilis" with the understanding that the Kansas State Board of Health would assist the Society in displaying this film before all county medical societies in the state. Upon motion by Dr. Blake, seconded by Dr. Trueheart and carried it was agreed that the Society

Alcoholism  
Senility  
Drug Addiction

## A Modern Ethical Hospital at Louisville

Founded 1904

Mental  
and  
Nervous Diseases

### Beautiful And Spacious Grounds Afford Outdoor Relaxation

Our **ALCOHOLIC** treatment destroys the Craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Whiskey withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

**MENTAL** patients have every comfort that their home affords.

Select cases of **SENILITY** accepted.

The **DRUG** treatment is one of Gradual Reduction; it relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

**NERVOUS** patients are accepted by us for observation and diagnosis, as well as treatment.

Physiotherapy—Clinical Laboratory—X-Ray.

Consulting Physicians and Surgeons.

Request  
Rates and Folder

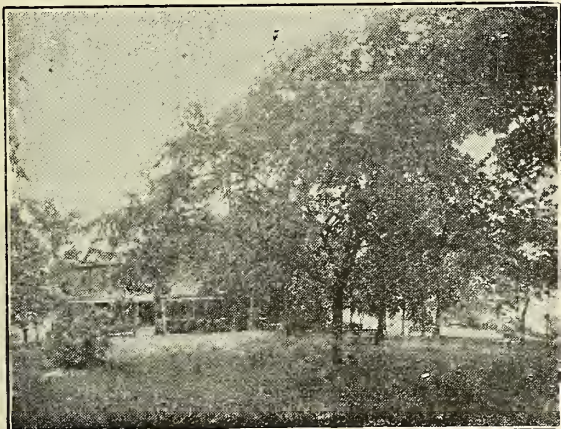
## THE STOKES HOSPITAL

Telephone,  
Highland 2101-2102

E. W. STOKES, M.D., Medical Director, 923 Cherokee Road, Louisville, Ky.

# Grandview Sanitarium

KANSAS CITY, KANSAS, (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of super accommodations for the care of:

Nervous Diseases

Mild Psychoses

The Drug Habit

and Inebriety.

Situated on a 20-acre tract adjoining City Park of 100 acres. Room with private bath can be provided.

The City Park line of the Metropolitan Railway passes within one block of the Sanitarium. Management strictly ethical.

Telephone: Drexel 0019

SEND FOR BOOKLET

**E. F. DeVILBISS, M.D., Supt.**  
OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.

## MEET YOUR FRIENDS

At The

# HOTEL KANSAN

TOPEKA, KANSAS

300 Rooms

Rates \$1.50 to \$3.00

All Fire Proof

Popular Priced Coffee Shop in Connection  
Also Main Dining Room and Private Dining Rooms N

Try Our Dinette for Light Lunches



should purchase this film if the Kansas State Board of Health desires to have the purchase made.

Dr. Armitage offered a suggestion that all county medical societies attempt to cooperate with their local newspapers in providing the public with medical information and that an effort be made to have medical speakers appear before lay gatherings of all kinds. The Council approved this recommendation.

Adjournment followed.

## COUNTY SOCIETIES

The Anderson County Medical Society met in Garnett on January 25 for election of officers. Dues for the entire membership of eleven were also collected at this time. The next meeting will be held on February 16.

Dr. T. G. Dillon, Kansas City, Missouri, and Dr. H. E. Carlson, Kansas City, Missouri, were speakers at a meeting of the Bourbon County Medical Society held in Fort Scott on January 24. Dr. Dillon spoke on "The Modern Treatment of Gonococcal Infections". Dr. Carlson's subject was "The Differential Diagnosis of Lower Abdominal Pain".

Approximately twenty-five members of the Butler-Greenwood County Medical Society were present at a dinner meeting of that organization held on January 24 in El Dorado. Dr. Harold Palmer and Dr. V. L. Scott, both of Wichita, addressed the meeting on "Lung Abscess" and "Convulsions in Infancy and Childhood", respectively. The annual President's Party of this society was held in Douglass on January 7, with Dr. G. G. Whitley, retiring president, as host. Guests at the party were: Mr. Gene Wilcox, El Dorado, Butler County Poor Commissioner; Mr. Ed Maher, Gordon, Butler County Commissioner; Mr. Joe Walker, El Dorado, Butler County Sanitary Engineer; and Mr. J. C. McComas, El Dorado, Director of the Laboratory, Susan B. Allen Hospital.

The annual election of officers of the Clay County Medical Society was held in Clay Center on January 5. Dr. C. E. Lewis, Abilene, was elected as president; Dr. J. B. Stoll, Clay Center, vice-president; Dr. F. R. Croson, Clay Center, secretary-treasurer; Dr. F. R. Croson, censor for three year term; Dr. G. W. Bale, Clay Center, censor for a two year term; and Dr. William Van Scoyoc, Clifton, delegate. Application for membership of Dr. Sievert A. Anderson, Morganville, was accepted. The annual reports of the officers were read and arrangements were made for renewal of the county contract for indigent medical care. Following the business meeting Dr. E. A. Pickens, Wichita, presented a paper on "Pathology of the Upper Urinary Tract Following Prostatic Hypertrophy".

Members of the Cloud County Medical Society held a dinner meeting in Concordia on January 11. Election of officers was held as follows: Dr. C. D. Kosar, Concordia, president; Dr. R. H. Kiene, Concordia, vice-president; and Dr. J. M. Porter, Concordia, secretary-treasurer.

Dr. E. J. Schulte, Girard, president of the Crawford County Medical Society, recently announced the following committee appointments for 1938: Public Policy Committee, Dr. C. S. Newman, Pittsburg, chairman, Dr. Allen Sandidge, Mulberry and Dr. Cecil McDonald, Pittsburg; Advisory Committee, Dr. W. A. Parrish, Pittsburg, chairman, Dr. E. C. Lightfoot, Girard, and Dr. M. Mehrle, Pittsburg; Program Committee, Dr. F. H. Rush, Pittsburg, chairman, Dr. C. H. Benage, Pittsburg, Dr. A. J. Revell, Pittsburg and Dr. Herbert Smith, Pittsburg; Board of

Censors, Dr. J. D. Pettet, Arcadia, chairman, Dr. W. S. Swart, Girard, and Dr. H. L. Stell, Pittsburg.

The Labette County Medical Society announces the following officers for 1938: Dr. A. C. Baird, Parsons, president; Dr. R. F. Roller, Altamont, vice-president; Dr. L. A. Proctor, Parsons, secretary-treasurer; Dr. R. W. Urie, Parsons, delegate; and Dr. T. D. Blasdel, Parsons, censor. At a meeting of this society held in Parsons on January 26, Dr. F. P. Helm, Topeka, Secretary of the Kansas State Board of Health, with the assistance of Mr. Harold Woolman, presented a talking motion picture on "syphilis". Dr. Sam Grantham Joplin, Missouri, addressed the meeting on "The Knee Joint". His paper was illustrated by a motion picture and also by x-ray views.

Dr. Allen Spafford, Parker, was elected president; Dr. L. D. Mills, Mound City, vice-president; and Dr. H. L. Clarke, La Cygne, secretary-treasurer of the Linn County Medical Society at a meeting held in Mound City on January 13.

A dinner meeting of the Marion County Medical Society was held in Marion on February 2. Dr. W. M. Tate, Peabody, gave a resume of the literature on "Insulin Shock Therapy", supplemented by a case report. Dr. R. R. Nykamp, Peabody, discussed "Tuberculosis Control".

Members of the Marshall County Medical Society held a dinner meeting in Marysville on January 20. The following officers were chosen for 1938: Dr. D. M. Diefendorf, Waterville, president; Dr. John Clifton, Vermillion, vice-president; Dr. Henry Haerle, Marysville, secretary-treasurer; and Dr. George Thacher, Waterville, delegate.

At a meeting of the Meade-Seward County Medical Society held in Liberal on January 7, the following officers were elected for 1938: Dr. W. N. Lemmon, Liberal, president; Dr. L. G. Blackmer, Hooker, Oklahoma, vice-president; and Dr. Leon W. Zimmerman, Liberal, secretary-treasurer. Following the business session, motion pictures on "Hernia" were shown.

Dr. Clifford Van Pelt, Paola, was chosen president of the Miami County Medical Society at a meeting held in Paola on January 12. Other officers selected were: Dr. W. L. Speer, Osawatomie, vice-president; and Dr. P. F. Gatley, Louisburg, secretary.

The members of the Neosho County Medical Society met in Chanute on December 20 for election of officers, as follows: Dr. James A. Butin, Chanute, president; Dr. J. F. Edwards, Chanute, secretary-treasurer; Dr. A. M. Garten and Dr. L. H. Cone, Chanute, censors; Dr. E. C. Bryan, Erie, delegate; and Dr. James A. Butin, alternate. It was decided that regular meetings of this Society be held the first Thursday in each month from September to June.

The Osborne County Medical Society met at Osborne on January 7, for annual election of officers. Dr. J. W. Cross, Portis, was chosen president. Dr. Cross has been practicing medicine for forty-five years and is one of the most active organization workers in Osborne County. Dr. Andrew P. Brown, Osborne, was reelected secretary.

Dr. C. W. Ware, Larned, was elected president of the Pawnee County Medical Society at a meeting held in January at Larned. Other officers elected were: Dr. Charles Starr, Larned, vice-president; Dr. Mary Elliott, Larned, secretary-treasurer; and Dr. C. E. Sheppard, Larned, delegate.

# CANNED FOODS IN THE CONTROL OF SUBACUTE DEFICIENCIES OF THE ANTI-PELLAGRIC FACTOR

As a result of his classical researches, Goldberger first proposed the name "Pellagra-Preventive Factor" for that component of the vitamin B complex which he found effective in the prevention of human pellagra. Subsequently, the terms vitamin "G" and sometimes vitamin "B<sub>2</sub>" were used to designate this effective factor. However, until biochemical research has conclusively established its identity, it is now apparent that we had best return to Goldberger's original designation for that entity which protects the human against pellagra.

In contrast to the other vitamin deficiencies, cases of severe deprivation of the anti-pellagic factor are not uncommon in certain regions of the United States. It is also known that if the intake of food be drastically restricted for some reason—alcoholism, for example—pellagra may be encountered in localities in which the disease is not endemic (1). For these reasons, it is not unreasonable to suspect that subacute or latent deficiencies of the P-P factor may also be existent in this country.

In the absence of typical dermatitis, available means for the diagnosis of deficiencies of the anti-pellagic factor are not entirely satisfactory. The practitioner must rely upon a variable group of less specific symptoms such as glossitis, diarrhea, digestive

disturbances, and nervous and mental disorders. However, consideration of these symptoms along with an evaluation of the diet upon which the subject had been maintained, may permit the conclusion that suboptimal intake of the P-P factor should be suspected.

The treatment of severe or perhaps even the mild manifestations of this dietary deficiency may require intensive therapy with food products or preparations known to be rich in the pellagra preventing factor. However, prevention of pellagra and maintenance of the cure appear to be largely matters of dietary regulation. In this connection, commercially canned foods deserve particular mention.

Goldberger and his associates directed considerable attention to evaluation of the pellagra-preventive powers of common foods. The values of foods, many of them canned foods, in the prevention of pellagra have been determined (2) by investigations in which human subjects were used.

In view of these facts, it is apparent that certain commercially canned foods will prove reliable, convenient and economical in the formulation of diets calculated to protect against mild or severe deficiencies of the P-P factor.

## AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

1. 1937. J. Am. Med. Assn., 108, 15.  
1935. Ibid. 104, 1377.

2. 1934. U. S. Pub. Health Rpts.  
49, 755.

*This is the thirty-fifth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



The Pratt County Medical Society entertained members of the Reno County Medical Society at dinner in Pratt on January 28. The program included installation of officers and a paper on "Clavicular Fractures", presented by Dr. Clarence W. Hall.

The 1937 officers of the Reno County Medical Society were reelected for 1938 at a meeting held recently in Hutchinson. These are Dr. G. A. Chickering, Hutchinson, president, and Dr. W. N. Mundell, Hutchinson, secretary.

Dr. E. R. Hill presented a paper on "Back Injuries", at a meeting of the Rice County Medical Society held in Lyons on January 13. Election of officers for 1938 was held at this meeting as follows: Dr. A. W. Schmidt, Lyons, president; Dr. A. A. Sprong, Sterling, vice-president; and Dr. Charles E. Fisher, secretary-treasurer.

Dr. F. L. Rector, Evanston, Illinois, Field representative of the American Society for the Control of Cancer, was guest speaker at a dinner meeting of the Saline County Medical Society held in Salina on January 13. His subject was "Control of Cancer as Presented to the Lay Groups". The program also included discussions of "Tuberculosis" presented by Dr. E. G. Padfield, Salina; Dr. W. R. Dillingham, Salina; Dr. O. R. Brittain, Salina; and Dr. C. M. Fitzpatrick, Salina.

Dr. A. L. Ashmore, and Dr. V. L. Scott, Wichita, were speakers at a meeting of the Sedgwick County Medical Society held in Wichita on February 1. Dr. Ashmore's subject was "Treatment of Empyema" and Dr. Scott spoke on "Convulsions in Infancy and Childhood". A meeting of this society to be held on February 15 will include the treasurer's annual report, a financial report of the Medical-Dental Credit Bureau, and other business matters.

The Shawnee County Medical Society held a dinner meeting in Topeka on February 7, with Dr. Edgar Van Nuys Allen, Rochester, Minnesota, as guest speaker. Dr. Allen's subject was "Hypertension". Various section meetings of the Shawnee County Academy are being held as follows: Literature Seminar Review, February 10; Section on Neurology and Psychiatry, February 17; Section on Surgery, February 24; and Section on Cardiology, February 28. The postgraduate course on "X-Ray", with Dr. A. K. Owen, Topeka, as instructor, started on January 19 and is meeting once a week. The next in the series of postgraduate courses will be conducted by Dr. J. L. Lattimore on "Hematology" and will start on March 8.

The Sumner County Medical Society held the annual ladies night dinner of that organization in Wellington on January 27.

The Tri-County Medical Society met in Arkansas City on January 20 for afternoon and evening sessions. Speakers and their subjects were: Dr. Henry H. Turner, Oklahoma City, Oklahoma, "Endocrinology"; Dr. Hugh L. Dwyer, Kansas City, Missouri, "Pediatrics"; and Dr. Earl C. Padgett, Kansas City, Missouri, "Burns" and "Cancer of the Face".

The Wilson County Medical Society met for dinner, at which members of the auxiliary were guests, in Neodesha on January 10. Plans were made for the coming meeting of the Southeast Kansas Medical Society and an informal program included discussion of personal experiences by Dr. P. G. H. Vander Wyst, Altoona, and Dr. W. T. Rich, Neodesha.

A meeting of the Wyandotte County Medical Society was held in Kansas City on February 1, with the following program: "Caesarian Sections in Kansas City, Kansas", Dr. T. J. Sims, Kansas City—discussion by Dr. H. V. Holter and Dr. Leslie Leverich, Kansas City; and "Statistical Study of the Caesarian Sections", Dr. Eugene Reeves, Kansas City—discussion by Dr. John Luke and Dr. H. W. King, Kansas City.

## MEMBERS

Dr. A. E. Bence and Dr. Charles Rombold, Wichita, attended the annual meeting of the American Academy of Orthopedic Surgeons held in Los Angeles, California, in January.

Dr. J. L. Cody, Sawyer, has recently moved to Little Rock, Arkansas.

Dr. Wm. E. Currie, Sterling, has returned to active practice following a year's absence.

Dr. Robert W. Diver, formerly of Clay Center, has opened offices in Coffeyville, where his practice will be limited to eye, ear, nose and throat.

Dr. A. C. Flack, Fredonia, was an honor guest at a dinner given recently by the Fredonia Chamber of Commerce for those who have been in business in that community for more than fifty years.

Dr. L. A. Forney, Hutchinson, has recently resigned his position of County Physician for Reno County, which he has held for nineteen years. Dr. J. A. Pinsker, formerly of Wichita, has been appointed to fill the vacancy created by Dr. Forney's resignation.

Dr. Karl A. Menninger, Topeka, has been appointed a member of the National Committee for the Study of Suicide.

Dr. Minda A. McLintock, Atchison, celebrated her eighty-second birthday on January 6, and will celebrate the fiftieth anniversary of receiving her medical degree on February 28. At the time she received her degree Dr. McLintock was the only woman graduate in a class of fifty-two. Dr. McLintock is also the only woman known to have staked a government claim with a pair of curling irons. The original curling irons are still in Dr. McLintock's possession and will be exhibited at the meeting of the American Medical Women's Association at Kansas City, Missouri, in October.

Dr. J. D. Pace, Parsons, has been appointed assistant county physician for Labette County.

Dr. Robert B. Stewart, Topeka, is the author of an article "For Healthy Bodies and Minds", in the February issue of "The American Girl".

Dr. W. J. Stewart, Frankfort, recently addressed the Women's Club of that city on "Syphilis".

Dr. Victor E. Watts, Smith enter, recently has been re-appointed County Health Officer for Smith County. Dr. Watts has held this appointment since 1926.

New offices have been opened by Dr. H. S. Bennie, Alma, and Dr. Lyle S. Powell, Lawrence.

Mr. John F. Austin, Executive Secretary of the Sedgwick County Medical Society, will speak at the Northwest Con-



## THE W. E. ISLE COMPANY

1121 Grand Ave. Kansas City, Mo.

●  
**ISLE SUPERIOR LIMBS**  
**ISLE SPECIAL LIMBS**  
●

*Doctor: Each amputee is individually fitted in our own factory in order to give comfort and satisfaction.*

## A POSTGRADUATE COURSE NEUROPSYCHIATRY IN GENERAL PRACTICE

April 25 to 30, Inclusive

Lectures, case studies, seminars and clinical demonstrations by members of the staff dealing with the neurological and psychiatric problems encountered in general practice. Fourth annual presentation of this course.

**Limited to 30 members      Fee, \$35.00**

For details write Dr. Robert P. Knight

**THE MENNINGER CLINIC**

TOPEKA

KANSAS

# THE Lattimore Laboratories

TOPEKA, KANSAS

J. L. Lattimore, M. D. Director

A. C. Keith, B. S. Chemist

Allen Gold, M.A., M.T.

H. C. Ebendorf, M. T.

**We invite consultation about the case that needs pathological service.**

**Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00**

*Containers furnished upon request.*

### OFFICES:

Topeka, Kansas      El Dorado, Kansas      Sedalia, Mo.      McAlester, Okla.

# WOODCROFT HOSPITAL



### PUEBLO, COLORADO

Founded 1896 by Dr. Hubert Work

A modern, newly constructed sanitarium for the scientific care and treatment of those nervously and mentally ill, the senile and drug addicts.

**CRUM EPLER, M.D.**  
Superintendent



ference to be held in Chicago this month. His subject will be "The Sedgwick County Medical Service Plan".

The scientific program for the Spring-Medico Military Symposium to be held in Kansas City, Missouri, March 28-29, will include the following Kansas City, Kansas, physicians: Dr. C. B. Francisco; Dr. Galen Tice; Dr. L. G. Allen; Dr. L. B. Spake; and Dr. O. W. Davidson.

---

## DEATH NOTICES

Dr. Lachlan MacLean Beatson, 54 years of age, died at his home in Arkansas City on January 2. Dr. Beatson was born in Wilmington Delaware, and received his degree from the University of Virginia School of Medicine. Before going to Arkansas City in 1919, he had practiced in Wilmington, in Foraker, Oklahoma, and Ashton, Kansas. During the World War Dr. Beatson served as a first lieutenant in the medical corps. He was a member of the Cowley County Medical Society.

Dr. John Elmer Hammer, 49 years of age, of Kiowa, died at the Veteran's Hospital in Wichita on January 2. Dr. Hammer was born near Union Star, Missouri. He graduated from the Gypsum, Kansas, high school, and the University Medical College of Kansas City in 1913. During the World War, Dr. Hammer served nearly two years overseas. In 1919 he moved to Kiowa and had resided there since that time. At the time of his death he was vice-president of the Barber County Medical Society.

Dr. Thomas Edward Horner, 62 years of age, died suddenly at the Atchison Hospital on January 16. Dr. Horner was a native Kansan. He received his medical education at the Kentucky School of Medicine, Louisville, from which he was graduated in 1897. For two years he practiced at Vliets, then at Severance, and moved to Atchison in 1911. He served for a year in France during the World War as captain in the medical corps. Dr. Horner was a member of Atchison County Medical Society.

Dr. Harvey Leander Kennedy, 69 years of age, died at his home in Ottawa on December 28, 1937. Dr. Kennedy was born in Lawrence, and was awarded his medical degree from the Kansas Medical College in Topeka in 1903. He had practiced in Ottawa for thirty-five years. Dr. Kennedy was a former president of Franklin County Medical Society.

Dr. James Melvin Little, 65 years of age died at Sterling on December 27, 1937. Dr. Little had practiced in Sterling for nineteen years, and was an 1898 graduate of the Western Reserve University School of Medicine in Cleveland, Ohio. He was a member of the Rice County Medical Society.

Dr. Elmer E. Morrison, 69 years of age, died at St. Rose Hospital in Great Bend on January 17. Dr. Morrison was born in Allerton, Iowa, and received his medical education at Barnes Medical College, St. Louis, Missouri, from which he was graduated in 1896. He had practiced medicine and surgery in Great Bend since 1898, where he was chief of staff of St. Rose Hospital. Dr. Morrison was a past president of Barton County Medical Society.

Dr. Walter Frederic Pine, 68 years of age, died in Murray Memorial Hospital in Dodge City on January 24. Dr. Pine was born in Kiskatom, New York, and moved to Pawnee Rock, Kansas, as a small boy. In 1890 he was admitted to practice as a registered pharmacist, and kept up his registration until he died, as one of the oldest

registered pharmacists in the state. He received his degree of doctor of medicine from the University Medical College of Kansas City in 1908 and had practiced in Dodge City since that time. Dr. Pine was one of the founders of the Ford County Medical Society and served as its secretary for many years.

Dr. Terry W. Warner, 75 years of age, died at his home in Parker on December 28, 1937. Dr. Parker was born near Mapleton, Kansas, and was graduated from Kansas State Normal College at Fort Scott. After several years of school teaching, he enrolled in the Northwestern Medical College, St. Joseph, Missouri, from which he was graduated in 1898. He had practiced in the Parker community since that time and had been a member of Linn County Medical Society for many years.

---

## ANNOUNCEMENTS

The American Board of Ophthalmology announces that in 1938 it will hold examinations in: San Francisco, June 13, during the American Medical Association; Washington, D. C., October 8, during the American Academy of O. and O. L.; Oklahoma City, November 14, during the Southern Medical Association. Applications should be filed immediately. Required number of case reports must be filed at least sixty days prior to date of examination. Application blanks can be procured from: Dr. John Green, 3720 Washington Ave., St. Louis, Missouri. The American Board of Ophthalmology has established a Preparatory Group of prospective candidates for its certificate. The purpose of this group is to furnish such information and advice to physicians who are studying or about to study ophthalmology as may render them acceptable for examination and certification after they have fulfilled the necessary requirements. Any graduate or undergraduate of an approved medical school may make application for membership in this group. Upon acceptance of the application, information will be sent concerning the ethical and educational requirements, and advice to members of the group will be available through preceptors who are members or associates of the Board. Members of the group will be required to submit annually a summarized record of their activities. The fee for membership in the Preparatory Group is ten dollars, but this amount will be deducted from the fifty dollars ultimately required of every candidate for examination and certification. For sufficient reason, a member of the Preparatory Group may be dropped by vote of the Board. In future issues of the directory of the American Medical Association certificated ophthalmologists will be so designated in their listing.

---

## AUXILIARY

---

### ATTENTION! COUNTY PRESIDENTS

Mrs. E. J. Nodurft, Chairman Exhibits

Your contribution for the 1937 exhibit at the State Fair in Topeka was splendid. Do you realize the benefit the exhibit is to our state work? It is the one way we have of showing to the public, the progress and history of that most wonderful profession, the practice of medicine. People have little spare time, so we should prepare our exhibit material so that it will catch the eye and be quickly di-

# IN PEDIATRIC PRACTICE

## *It's Individualized Care*

### PROPERTIES OF KARO

Uniform composition  
Well tolerated  
Readily digested  
Non-fermentable  
Chemically dependable  
Bacteriologically safe  
\*Non-allergic  
Economical

\*Free from protein likely to produce allergic manifestations.

### COMPOSITION OF KARO

(Dry Basis)

Dextrin.....	50%
Maltose.....	23.2%
Dextrose.....	16%
Sucrose.....	6%
Invert sugar.....	4%
Minerals.....	0.8%

### KARO EQUIVALENTS

1 oz. vol.....	40 grams 120 cal.
1 oz. wt.....	28 grams 90 cal.
1 teaspoon....	15 cal.
1 tablespoon...	60 cal.

Mothers want their babies treated as individuals, not as cases; their babies followed, not their charts; their physiques treated, not the labelled conditions; and the doctoring done economically.

When infant feeding materials prescribed are within the reach of every budget, mothers will appreciate the physician and the babies will thrive. Karo is the economical milk modifier. It costs 1/5 as much as expensive modifiers.

For further information, write  
CORN PRODUCTS SALES COMPANY  
SJ-2 17 Battery Place, New York, N. Y.



☆ Infant feeding practice is primarily the concern of the physician, therefore, Karo for infant feeding is advertised to the Medical Profession exclusively.



gested. For this reason, exhibits should be in the form of placards, posters, maps, diagrams, examples or illustrations of some form or forms of activity or specimens of work done. The more unique or unusual the exhibit is, the more interest it will arouse. If you should send a scrap book, please do prepare an index, to be placed outside, so that its contents may be quickly grasped.

For the year 1937-1938, the Advisory Council, from The Kansas Medical Society, has asked the auxiliary to stress exhibits as our major project. The Camp Transparent Woman is one special feature which we hope to include in the auxiliary exhibit at the next Annual Meeting in Wichita, Kansas, May 9-10-11-12, 1938. This, as you know, is a particularly attractive exhibit.

The value of the exhibits can best be shown if each county will contribute some part to the exhibit booth. The Kansas Medical Society has officially authorized the auxiliary to sponsor this booth in the scientific section at the state meeting in Wichita, 1938. This is our opportunity of showing the unbelieving medical society members what an auxiliary can do. Try to use some method of showing the benefits you have been able to give your county society through auxiliary work, such as an increase of membership, interest, and attendance of the doctors at their own county meetings.

The advisory committee has asked each county auxiliary to study their community needs and decide as an auxiliary what would be most useful to your lay-people. The state executive office is now preparing a permanent source of exhibit material to be available at all times by communicating with me or Mr. Clarence Munns in Topeka. This material is being arranged by the American Medical Association; American Society for the Control of Cancer; United States Public Health Service; American College of Surgeons; H. R. Wahl, M.D., Dean of Kansas University Medical School; C. H. Lerrigo, M.D., Secretary of Kansas Tuberculosis and Health Association; and F. P. Helm, M.D., Secretary of Kansas State Board of Health.

These exhibits should be used at least once during the year at such meetings, which are being held in your community, as state and district general Federation of Women's Clubs, state and district Parent-Teacher meetings, Girl and Boy Scout, Y.M.C.A., and Y.W.C.A. meetings, American Legion, Civic Club meetings, Red Cross, Kansas Teacher's meetings, county and state fairs, and store windows during American Health and Child Health weeks. This material will be held ready for your use any time and each auxiliary is urged to seek opportunities for such exhibits to be used and to make the necessary contacts.

Now, may I count on each auxiliary for the following—

1. An exhibit showing some activity of your work the past year.
2. A scrap-book using clippings, pictures and articles concerning your medical people and your auxiliary work.
3. A report that you have used at least one exhibit in your community for lay people or organizations.

I shall look forward to meeting you on May 9 in Wichita. Bring your exhibit or send it to me by 9:30 A.M., May 9 so we may be able to present to The Kansas Medical Society Scientific Exhibit section, a booth which is worthy of this fine consideration they have given us.

The Thirty-Fourth Annual Congress on Medical Education and Licensure will be held at the Palmer House in Chicago, Illinois, on February 14, and 15, 1938.

## PRESIDENT'S MESSAGE

Dear Auxiliary Members:

Spring one might say is just around the corner, which reminds me that programs are being made by the different organizations. Those of us who may be on a program committee should see that at least one or two medical programs, preferably on cancer, heart disease and venereal diseases are given. It is suggested that whenever possible a physician be secured as speaker.

Plans for conventions and state fairs are underway and we as doctor's wives should sponsor medical and public health exhibits. We do not have to wait, however, for a convention but put your exhibit in a down town store window. They bring a living picture of the work that has been done or that is being done by the medical profession.

Now is a good time to investigate what approved books you have in your library on medicine, quackery and public health. Plans are being made at this time wherein an approved list of this kind will be published in the near future.

Mrs. Keck our national president plans on being with us March the second for an afternoon meeting in Topeka. The time and place will be announced later. Put a ring around that date on your calendar and let's make a day of it.

Mrs. R. W. Urie.

The last quarterly meeting for 1937 of the Central Kansas Auxiliary was held at the home of Mrs. C. D. Blake of Hays on December 16. Election of officers for the coming year was held with Mrs. G. C. Unrein, Hays, chosen as president; Mrs. F. S. Hawes, Russell, vice president; Mrs. A. M. McDermott, Ellis, secretary; and Mrs. P. S. Brady, Hays, treasurer. In the evening the auxiliary members were dinner guests of the Central Kansas Medical Society. The next meeting will be in Ellsworth in March.

Mrs. R. W. Urie, Parsons, state president, and Mrs. F. E. Coffey, Hays, president-elect, were honor guests at a tea given by the Sedgwick County Auxiliary at the home of Mrs. E. S. Edgerton in Wichita on January 10. The program included vocal selections by Mrs. Carl Johnson, and a review of "Let the Hurricane Roar", given by Miss Ruth McCormick, dramatic instructor at Friends University. Other out of town guests at the tea were Mrs. Foster Dennis, Dodge City; Mrs. E. C. Duncan, Fredonia; Mrs. L. B. Gloyne, Kansas City; Mrs. Omer West, Kansas City; and Mrs. R. C. McIlhenny, Conway Springs.

Mrs. Urie and Mrs. Coffey were also honored with a luncheon given in Hays on January 17 by the members of the Central Kansas Auxiliary. Following the luncheon the guests were entertained at the home of Mrs. Murray Eddy.

The January 10 meeting of the Shawnee County Medical Auxiliary was held at the home of Mrs. Ransley Miller with twenty-five members present. Several new members joined the auxiliary. The program, "Selected Poetry", was given by Mr. Joseph Gartside, English instructor at Washburn College. The president, Mrs. Floyd Taggart, con-



# Why Cosmetics?



## Because . . .

It is woman's nature to make the most of her appearance . . .

Because, carefully selected and intelligently used, cosmetics keep a woman looking her best . . .

Because the knowledge that one's appearance is pleasing has a great deal to do with a healthy attitude towards life . . .

And because the chances are that you yourself, Doctor, perhaps without realizing it, appreciate the many little highlights of charm that cosmetics impart.

## So . . .

Why not encourage your patients to take an interest in their appearance?

Because LUZIER REPRESENTATIVES are trained to help their patrons select suitable cosmetics they can be of indirect service to you and of direct service to your patients.

---

**LUZIER'S, INC., MAKERS OF FINE COSMETICS & PERFUMES**

---

KANSAS CITY, MO.



ducted the business session. A tea and social hour followed with Mrs. O. A. McDonald and Mrs. C. H. Lerrigo as assisting hostesses.

The Ford County Auxiliary entertained at a benefit bridge on November 18 at the home of Mrs. V. B. Dowler in Dodge City. The proceeds were used to purchase Hygeia subscriptions for the schools of the county. This auxiliary also held two dinner meetings in Dodge City, one on November 15 and one on December 10. The dinners were preceded by short business sessions.

Members of the Wilson County Auxiliary held a meeting in Neodesha on January 10, following dinner with the Wilson County Medical Society. Mrs. H. E. Morgan, Fredonia, presented a paper on "Safety in the Home".

### NEW BOOKS RECEIVED

**THE 1937 YEAR BOOK OF UROLOGY**—Edited by John H. Cunningham, M.D., Associate in Genito-Urinary Surgery, Harvard University, Cambridge, Massachusetts. Published by The Year Book Publishers, Chicago, Illinois, at \$2.50 per copy. Octavo 472 pages with 120 illustrations. Includes sections on: General Considerations; The Kidney; The Adrenal; Peri and Pararenal Conditions; The Ureter; The Bladder and Urachus; Transurethral Operations; The Prostate; The Genitalia; and Gonorrhea.

### FAIRMOUNT MATERNITY HOSPITAL

Offers a modern fireproof hospital for the seclusion and care of the unmarried mother. Adoptions arranged if desired.

**FRED B. KYGER, M.D.**

Obstetrical Director

1414 East 27th Street,

Kansas City, Mo.

## DEPENDABLE PRODUCTS FOR PHYSICIANS

Every product we manufacture is guaranteed true to label and of reliable potency. Our Products are Laboratory Controlled.

Catalog mailed on request.

**THE ZEMMER COMPANY**

Chemists to the Medical Profession

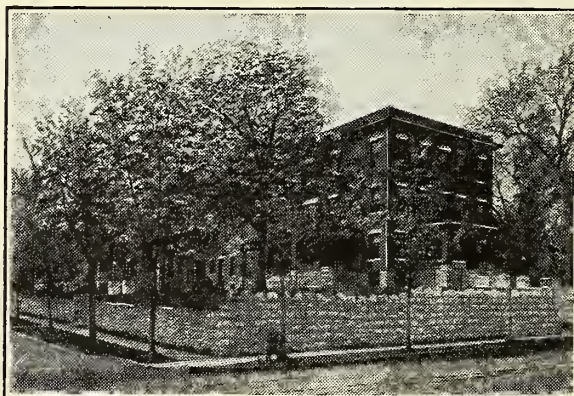
Oakland Station KA 2-38

Pittsburgh, Pennsylvania

**HERMON S. MAJOR, M.D.**  
Medical Director

## SIMPSON-MAJOR SANITARIUM

3100 Euclid Avenue, Kansas City, Mo.



Electricity

Heat

Water

Light

Exercise

Massage

Rest

Diet

Medicine

Nervous

Diseases

Selected

Mental

Cases.

Alcohol

Drug and

Tobacco

Addictions

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.

## FEBRUARY TWENTY SECOND

Forty years ago on Washington's Birthday Jack started in the optical business. Peculiarly enough, Bob started on the same day but some years later, twenty-six years ago.

Sixty-six years of practical experience back the efforts of Q-D in making it more pleasant and profitable to deal with them.

### QUINTON-DUFFENS OPTICAL COMPANY

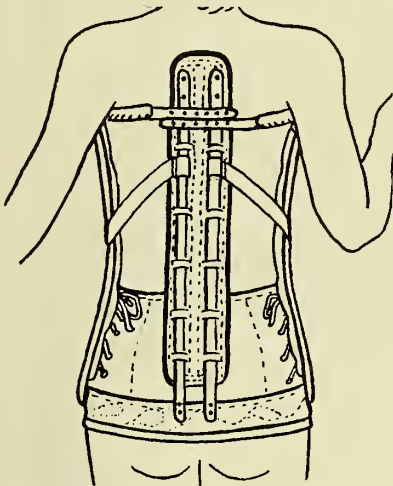
*Your Local Independent Wholesaler*

TOPEKA

HUTCHINSON

SALINA

## A COMPLETE SERVICE



We make all types of braces, splints, belts, elastic hose, crutches, arch supports and special apparatus.

If your patients cannot come to us we will come to them. Prices reasonable.

**Camp's Supports**

**Kansas City Brace & Splint Co.**

Phone Drexel 0640

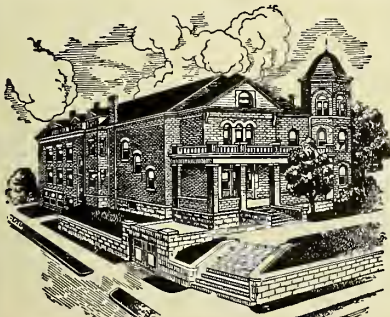
847 Minnesota Avenue Kansas City, Kansas



The Lassen's dining service enjoys a well-won reputation for an excellence of food and service the most exacting guest can require. Here the leading conventions, of professional and business men are held. The Lassen cordially invites the members of The Kansas Medical Society to sojourn at this fine hotel when visiting Wichita.

ROY MOULTON, MANAGER

**HOTEL LASSEN**  
**WICHITA, KANSAS**



## Alcohol. Barbital. Morphine

Addictions Successfully Treated Since 1897  
by the Methods of Dr. B. B. Ralph.

WRITE FOR DESCRIPTIVE BOOKLET

**THE RALPH SANITARIUM**

RALPH EMERSON DUNCAN, M. D., Director

Established in 1897

529 Highland Ave.

Telephone Victor 4850

Kansas City, Mo.



# IN SINUSITIS AND HEAD COLDS

when you prescribe a liquid vasoconstrictor, consider three points:

**1**

## PROLONGED EFFECTIVENESS

'Benzedrine Solution' produces a shrinkage which lasts 18 per cent longer than that produced by ephedrine.

**2**

## MINIMUM SECONDARY REACTIONS

On continued use 'Benzedrine Solution' produces practically no secondary vasomotor relaxation.

**3**

## REAL ECONOMY

'Benzedrine Solution' is one of the least expensive liquid vasoconstrictors.



# BENZEDRINE SOLUTION



Benzyl methyl carbinamine, S.K.F., 1 per cent in liquid petrolatum with  $\frac{1}{3}$  of 1 per cent oil of lavender. 'Benzedrine' is the registered trade mark for Smith, Kline & French Laboratories' brand of the substance whose descriptive name is benzyl methyl carbinamine.

**SMITH, KLINE & FRENCH LABORATORIES**

Philadelphia, Pa.

Established 1841



## EXERCISE FOR BOWEL REGULATION

The patient who is unable to exercise or adhere to a suitable diet will appreciate the aid of Petrolagar to maintain a regular bowel movement. Petrolagar softens hard stools and assists the bowel to function normally. Its pleasant flavor, devoid of the oily taste associated with plain mineral oil, makes Petrolagar very easy to take. Prescribe Petrolagar for bowel management, it's "Council Accepted." Petrolagar Laboratories, Inc. • Chicago, Ill.

Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.



# Petrolagar

## THE DRINK THAT FEEDS NURSING MOTHERS AND PREGNANT WOMEN

The special food aid which Cocomalt brings during lactation and pregnancy has found favor with physicians everywhere. Precision manufacture and purity-sealed cans insure that a measured amount of Calcium, Phosphorus, Vitamin D, Iron and other food essentials is delivered in each ounce-serving of Cocomalt.

	1 Ounce of Cocomalt adds	1 Glass of Milk (8 Liquid Ozs.) contains	Thus, 1 Glass of Cocomalt and milk contains
IRON	0.005 GRAM	*TRACE	0.005 GRAM
VITAMIN D	134 U. S. P. UNITS	*SMALL AMOUNT; VARIABLE	134 U. S. P. UNITS
CALCIUM	0.15 GRAM	0.24 GRAM	0.39 GRAM
PHOSPHORUS	0.16 "	0.17 "	0.33 "
PROTEIN	4.00 GRAMS	7.92 GRAMS	11.92 GRAMS
FAT	1.25 "	8.53 "	9.78 "
CARBOHYDRATES	21.50 "	10.97 "	32.47 "

★ Normally Iron and Vitamin D are present in Milk in only very small and variable amounts.

† Cocomalt, the protective food drink, is fortified with these amounts of Calcium, Phosphorus, Iron and Vitamin D.

Thus, since each ounce-serving of Cocomalt has been fortified with .15 gram of Calcium, .16 gram of Phosphorus, an 8-oz. glass of milk with 1-oz. of Cocomalt provides .39 gram of Calcium, .33 gram of Phosphorus. And, helping insure that the system can utilize these food-minerals, each ounce of Cocomalt also contains 134 U.S.P. Units of Vitamin D, derived from natural oils and biologically tested for potency. The 5 milligrams of effective Iron in each ounce of Cocomalt are biologically tested for assimilation.

The creamy, delicious flavor of either Hot or Cold Cocomalt appeals to old and young alike. Inexpensive, Cocomalt is for sale in purity-sealed cans at grocery and drug stores in ½-lb., 1-lb. and the economical 5-lb. hospital size.

Cocomalt is the registered  
trade-mark of R. B. Davis  
Co., Hoboken, N. J.

## FREE: TO ALL PHYSICIANS

R. B. DAVIS Co.,  
Hoboken, N. J. Dept. 25-B  
Please send me a FREE  
trial can of Cocomalt.

Doctor \_\_\_\_\_

Street and Number \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_





**16,000****ethical**

Since 1902

**practitioners**

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

**\$1,500,000 Assets**

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited  
with the State of Nebraska**

for the protection of our members  
residing in every State in the U.S.A.



Since 1912

**PHYSICIANS CASUALTY  
ASSOCIATION**

**PHYSICIANS HEALTH  
ASSOCIATION**

400 First National Bank Building  
**OMAHA - - - NEBRASKA**

**REPRINT PRICE LIST**

Reprints from articles in the  
**KANSAS MEDICAL JOURNAL**

All Reprints are made the same size as  
Journal pages, 7 $\frac{3}{4}$  x 10 $\frac{1}{2}$  inches.

Transportation charges on reprints are  
to be paid by the Author

No. Copies	Pages	Without Cover	With Cover
100.....	4	\$ 9.00	\$12.25
250.....	4	9.75	14.50
500.....	4	11.00	17.50
1000.....	4	18.00	26.00

No. Copies	Pages	Without Cover	With Cover
100.....	8	\$12.50	\$16.00
250.....	8	14.00	18.00
500.....	8	16.00	23.00
1000.....	8	21.00	32.00

No. Copies	Pages	Without Cover	With Cover
100.....	12	\$16.00	\$20.50
250.....	12	18.25	23.50
500.....	12	21.25	28.25
1000.....	12	28.00	39.00

**CAPPER PRINTING CO.**

Capper Building,  
**TOPEKA, KANSAS**

**The Mary E. Pogue School**

Established 1903

A school for the care and training of children  
mentally subnormal or who suffer from organic  
brain diseases.

Gilbert H. Marquardt, M.D., Attending Physician  
William H. Holmes, M.D., Consulting Physician  
Gerard N. Krost, M.D., Pediatrician

**Wheaton, Ill. Phone—Wheaton 68**

40 Cereva Road

*Behind***MERCUROCHROME**

(dibrom-oxymercuri-fluorescein-sodium)

*is a background of*

Precise manufacturing methods in-  
suring uniformity

Controlled laboratory investigation

Chemical and biological control of  
each lot produced

Extensive clinical application

Thirteen years' acceptance by the  
Council of Pharmacy and Chem-  
istry of the American Medical  
Association



A booklet summarizing the impor-  
tant reports on Mercurochrome and  
describing its various uses will be  
sent to physicians on request.

**Hynson, Westcott & Dunning, Inc.**

BALTIMORE, MARYLAND

**JOHNSON HOSPITAL****CHANUTE, KANSAS**

Complete Clinical

Laboratory

Radium

X-Ray

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

---

Volume XXXIX

MARCH, 1938

Number 3

---

## A THYROID SAGA

L. S. Nelson, M.D.

Salina, Kansas

In presenting a saga of this type, one is necessarily limited to such a degree that many events are left out. Some discrepancies creep in as to who did which, and when, because so often concurrent workers express similar ideas. In so far as time would permit, data has been checked and credit given the person doing the most accurate work, making the best presentation which has stood the test of time. We believe also that clarity is served by a time division such as the ancient times, then the classical or medieval period, and finally the modern era. It will require a hundred years at least to sift the voluminous modern work and writings, to learn what is chaff and what is kernel. For this reason, the brevity will, we hope, be excused.

Enlargement of the thyroid gland must have existed before history began, because interesting references are contained in several places where the thoughts of men were first transcribed on some sort of permanent record. These references are of such a casual nature, too, and would indicate such a rather general previous knowledge, that we are prone to believe that man suffered this malady even before he assumed the upright position.

In the era which we have chosen to call the ancient history of the thyroid gland, we turn to the Egyptian papyrus of Ebers for remarks on the disease of goiter, as we turn to it in recounting the history of man's early knowledge of the disease of cancer, because there is a reference which some historians believe to be appropriate. As you know, this Egyptian record has been given the date of 1550 B.C., and it contains this sentence: "if thou findest in the patient's throat a fatty growth which resembles an abscess, and which yields under pressure of the finger, say to thyself, this man has a fatty tumor in his throat, I will treat this disease with the knife, paying heed to the vessels". If this refers to goiter, it is not only one of the earliest references to this disease, but also one of the earliest records of surgical treat-

ment. About this same time, or earlier, India made a contribution which more definitely refers to the disease of this gland. The Artharvo Veda, which is a collection of Hindu practices, written in India some time before 1500 B.C., contains an incantation to be recited by the priests of Buddah for the cure of goitrous patients.

Hippocrates, about 400 B.C., wrote in his treatise, "Du Glandulis", concerning some glands near the jugular vein which some historians believe to refer to the normal thyroid gland. There is no discussion, at least in that treatise, about the diseased gland, and these are together the most important and authentic of the early references in ancient history to the subject in question.

A saga of all eras of the thyroid gland must contain some references to iodine, or at least to iodine-containing substances, because that element has somehow pervaded its entire history. As it concerns the ancient era, let us remember that even though it was unknown as an element, nevertheless the healers in China as long ago as 1600 B.C. gave the goiter patients seaweed and burned sponge for the relief of their symptoms. Quite independently, and perhaps as long ago, in Chile the value of seaweed in the treatment of hyperthyroidism was well known. The name of "Palo Coto", meaning "Goiter Stick" being applied to the stem of seaweed which was chewed by sufferers. More concerning the element of iodine will be included in recounting some of the events in each era, and if we allow the birth of Christ to separate the ancient from the modern, we are ready to turn to the classical period in the development of our present day knowledge.

Of the many references in the medieval period, the earliest which seem to be accurate and authentic and of value are those of both Pliny and Celcus who were contemporaries about 100 A.D. Celcus described rather clearly a cystic goiter and also explained that if medical treatment failed to cause relief of symptoms, he is quoted as having said, "Sed scapelli curatio brevior est", which is, of course, translated as "the scalpel is the quickest cure". He also said that men and swine were subject to swellings in the



throat which were caused by the noxious quality of the water they drank, and so far as I have been able to learn, this is the first reference to drinking water as the cause of goiters. He amplified this by saying that it was because of the high mineral content, which of course has been proved to be erroneous.

All of the references thus far seem about equal in importance and indicate considerable knowledge on the part of learned individuals of those times concerning the subject in question. Now Galen, about the second century A.D. made a great stride forward, particularly in the knowledge of anatomy of the normal thyroid gland, as he did in many other fields. One of the reasons he was able to do this was because he served as surgeon for the gladiators, and in that capacity had an excellent opportunity to observe human anatomy, particularly of the neck, since it was such a vulnerable spot in the combat. Originally he, along with the others, seemed to think that all glands were for the purpose of lubricating some organ in the body, but he studied the anatomy sufficiently to discover that the humors ooze out and trickles down and there is no need for a duct. This seems to be a rather remarkable observation in view of the knowledge extant at his time, and while he did not definitely suggest that any gland might be one of internal secretion only, he did find the absence of ducts and made the statement that no duct was necessary. No further knowledge was gained until the sixteenth century and while Galen was indeed a great man, it seems almost incredible the amount he knew and how much of his knowledge ceased to exist for fourteen centuries. Certainly there was little advancement during all that time, not only concerning the thyroid gland, but with most all of medicine. This, of course, was due not only to his dogmatism, but also to the religious beliefs which prevented any anatomical study. The medieval church will always have to take some of the blame for the lack of the development during those centuries which immediately followed Galen.

There was discovered in 1918, by Sudholm, two almost identical copies of the surgical text, which after being sifted down by the best authorities, are copied directly from the Pantequi of the great translator, Constantine, which in turn is the translation of "The Royal Book" written by Ali Addas, a Persian court physician who died in 994 A.D. This gentleman very kindly summarized the whole medical literature of the Moslems. It gives the first authentic description of the goiter operation and fixes its date as the tenth century, A.D., about which there can be no question. He describes the use of seaweed as medication and then says, "for goiter in which such medication is of no avail, surgery is necessary.

The skin is cut length wise, and the tumor is withdrawn with all material adherent to it. If you wish to be certain of this, you may cauterize the whole interior of the cavity from which you have extracted the tumor, making sure no vessels nor nerves are injured in surgery of this kind, if however, such an accident occurs, you should suture at each side of the wound. After ligation, it is seared with a cautery and whatever formed in the wound is broken. If you do not wish to cauterize when the tumor is removed, search diligently to make sure that nothing remains, for if anything remains it will form again as before. When the region has been completely cleared out, it is sutured and red powder is applied and gauze is placed in the wound and the treatment proceeds, as stated above". Surely there can be no mistake that this is a real part of the saga of the thyroid gland, and thus the tenth century is the beginning of actual surgery as recorded in known records. Nothing has been discovered to equal the clarity of the description above, and it also told that the use of seaweed and burned sponge was followed by surgery. We must here bow to the Moslem world in our saga, for no matter from whence their knowledge came, the record was thus handed on and it is a marvel of completeness.

It is probably most convenient to begin our modern period with the awakening of scientific investigation in the sixteenth century, leaving undisturbed the long lapse of time which passed after Galen until such a reawakening began. It is difficult to know who was most concerned in the beginning of scientific investigation. It is certain that once the embers were stirred soon the fire turned into a flame and many interesting things were discovered. We can here briefly mention just a few men and their contributions. The first early perfect drawings were made by the artist, Leonardo da Vinci, and were of animal thyroid glands. Then Vesalius described the gland clearly, but in one respect, even though his publication dates 1543, he knew less than did Galen, for he thought its secretions moistened the pharynx. Casserius, of Padua, first described the thyroid gland as being one body connected by an isthmus which was often not visible. Fabrius ab Aquapendente in 1619 was the first individual to localize goiter as a disease in the thyroid gland, and not until 1659 did Thomas Wharton give the name of thyroid to the gland and turned attention to its structure. Drake, Cheselden, Morgagni all commented and each added a little of truth and much of confusion because as yet there was no knowledge of internal secretion, and herein Claude Bernard deserves immortality because in 1880 he first showed conclusively the difference between internal and external secretion.

It is a little strange, and yet quite true, that our

present day conception of the normal function of this important organ has been derived from the study of goiter and its treatment. It has seemed interesting in this study, too, to learn that even in antiquity and from there throughout our own time, drinking water has been considered causative. Pliny believed this, Marco Polo remarked concerning it in Asia, where some wells were even termed "goiter wells".

The modern history is too complex to receive a lengthy discussion except to recount some of the most important events, and I believe everyone would think iodine and its connection with the treatment and prevention of goiter to be one of the most important. We have previously seen how it was used, though unknown as an element in the earliest history, but it was not until this modern era, in fact in 1812, it was found as an element by Courtois, and then in 1820 Coindet ingeniously concluded that it was an element concerned as an active constituent or remedy for goiter. He recommended twenty drops of the tincture three times a day as effective treatment. As nearly as we can learn, exophthalmic goiter was described in 1786 by Parry. It is thought by others to have been described in 1825, but Dr. Graves in England, where it was known as Graves' Disease, produced his superior description in 1835, and Basedow doing the same in Germany in 1840.

Of all the more recent advances, and particularly in the chemistry of the thyroid gland, it is difficult to know what research will be considered a real stepping stone even ten years hence. The complexities of modern research and the impossible evaluation prior to clinical application are obviously deterrents to proper appreciation. The discovery of thyroxin and its action, the multiple thyroid hormone possibilities, and above all, the thyroid activator hormone of the anterior pituitary may any or all become important in our care of the goiter sufferer. At present, after viewing partially the literature, one feels constrained to remark that there is a definite interrelationship between the pituitary gland and the thyroid gland, but the evidence of exactly what the kinship really is may be questioned and therefore how it may ultimately be applied.

There is no doubt about the importance of iodine, however, today as in every era, but there is with a fuller knowledge, need for evaluating its exact place today and reviewing what those say who have a wide experience with it. It seems to me that a summarization is about thus:

#### I Prevention of goiter:

- (a) Where soil lacks this element minute doses, best given in salt, tend to correct anatomical changes and dysfunction

which follow constant deprivation of the necessary element.

#### II In the treatment of dysfunction as follows:

- (a) As preoperative and postoperative treatment of hyperthyroidism.
- (b) In hypothyroidism—it is advantageously used in small doses.
- (c) It may aid in differential diagnosis and its judicious use here is important.

Many variations of the above rule are extant. The amount to be used—the best preparation in which type of cases, etc. ad infinitum, but much of this probably is the proverbial mole hill and no mountain. However, one tremendous step forward has been the warning against the continued use over long periods of time in the treatment of any type of goiter. The iodine fast patient is always a greater surgical risk and the condition only arises when someone follows the course of least resistance and practices medicine more in accordance with the patient's wish than with scientific acumen. A refillable prescription containing iodine is often a dangerous thing to give a patient with hyperthyroidism because they cannot understand as well as our profession ought to its limitations.

Finally, there has come within the last ten years through the efforts of the American Society for the Study of Goiter, a simple, easy, understandable classification of the pathological thyroid gland, and this should be adopted wherever it has not been for the sake of brevity, clarity and uniformity. This classification is so simple that it will live. This method of designation is:

Diffuse—toxic and non-toxic.

Nodular—toxic and non-toxic.

The maze of pathological subdivisions we leave to more academic minds, knowing that so far as the patient is concerned malignant gland is the most dangerous, though much more rare than hyperthyroidism.

In conclusion, I should like to pay tribute to Dr. Crile's work in comparative studies which have brought him to conclude most interestingly that the thyroid gland is the only mechanism maintaining the rate of oxidation at a varying level to meet varying conditions of pregnancy, chronic infection, seasonal changes, etc. He believes also that the brain maintains metabolism at a basal level and that these two organs evolved together. Thyroid and adrenals are the means of changing the speed of oxidation and because of these facts he believes he is showing why man is in his unique position in the energy scale and suggests not only why he has achieved his eminence, but also why he is subject to peculiar diseases.



## BIBLIOGRAPHY

- Warmack and Cole: "Thyroid in Hypoglycaemia".  
 Lehman: "Hyperthyroidism in Children".  
 Perkin: "Blood Iodine Level in Thyroidectomy".  
 Wetherell Grout: "Iodine in Toxic Goiter".  
 W. O. Thompson, M.D., S. G. Taylor, III, M.D., P. P. Thompson, M.D., L. F. N. Dickie, B.S.: "Interrelations of Pituitary and Thyroid".  
 W. G. Maddock, M.D., F. A. Collier, M.D., Swen Pederson, Ph.D.: "Thyroid Crisis: Its Relation to Liver Function and Adrenalin".  
 Zechel: "Experimental Regeneration of Thyroid Gland" (Surgery, Gynecology, and Obstetrics, 1931).  
 Clute: "Technique Secondary Operations" (Surgery, Gynecology, and Obstetrics, 1931).  
 Lehey: "Surgical Management of Intrathoracic Goiter".  
 Plummer Mayo: "Surgical Operations and Associated Infections as possible Etiological Factors in Development of Exophthalmic Goiter and Hyperthyroidism from Adenomatous Goiter".  
 Hunter and Madden: "Pituitary Adrenal Irradiation in Goiter" (American Association for the Study of Goiter) 1936.  
 Stone: "Cross Grafting of Endocrine Tissues" (Editorial, Surgery, Gynecology, and Obstetrics, 1934).

## MUCOCELE OF THE APPENDIX\*

### A Case Report with Review of the Literature

Paul E. Craig, M.D.

Charles H. Fortner, M.D.

Coffeyville, Kansas

The pathological entity variously described by writers, as hydrops, cystic disease, retention cyst, pseudomucinous cyst, colloid cyst, or mucocele of the appendix, is a comparatively rare condition. Dodge<sup>1</sup>, in 1916, reported 142 cases; Davison<sup>2</sup>, in 1926, published an article summarizing eighteen; Mayo and Fauser<sup>3</sup>, in 1932, reviewed a series of seventy-six; and, in 1936, Dannreuther<sup>4</sup> added another eight, which, with additional sporadic reports, have brought the total number of recorded cases to 300.

Not only is mucocele of the appendix of rare occurrence, but it is a source of grave danger to the patient. For with the advent of rupture and extrusion of the pseudomucinous material into the peritoneal cavity, there is transplanted and grafted upon the omentum, numerous mucin cells capable of proliferation and function, leading to a condition described by Werth<sup>5</sup> in 1884, termed pseudomyxoma peritonei. This is an accumulation of gelatinous material within the abdominal cavity, similar to that which eventuates from ovarian cystadenomata, ophthalmomesenteric cysts, intestinal diverticula, retroperitoneal cystadenomata, and in the course of recognized malignancy.

Pseudomyxoma peritonei, of appendiceal origin, may therefore be regarded as malignant. Removal should be attended with great care in order to prevent peritoneal contamination and subsequent dissemination of mucin cells.

Mucocele is of special interest to the abdominal surgeon, for it may simulate any intra-abdominal pathology, thus challenging his diagnostic acumen.

### HISTORICAL

Rokitansky<sup>6</sup>, in 1842, was lead to believe that a mucocele resulted from obturation of the "vermicular process"—analogous to dropsy of the efferent ducts of glands consequent to obstruction. Twenty-one years later, in the year 1863, Virchow<sup>7</sup> gave us a classical description of the pathology of mucocele and recognized the disease as colloidal degeneration of the appendix. Fere<sup>8</sup>, in 1887, was the first to designate the condition as mucocele, which terminology has won favor and usage in the past decade.

### INCIDENCE

Castle<sup>9</sup> found twenty-eight cases of mucocele of the appendix in 13,158 postmortems, or about 0.21 per cent.

Both sexes are equally affected.

Lazarevic<sup>10</sup> reported mucocele to have occurred in a girl sixteen years of age, while Fraenkel<sup>11</sup> found a pseudomucinous cyst, of appendiceal origin, in a man aged seventy-eight. Dannreuther<sup>4</sup> reported eight cases to have occurred in 8,457 appendectomies.

### ETIOLOGY

It happens occasionally that as a result of an attack of acute appendicitis which has stopped short of perforation and has subsided spontaneously, a stricture is formed in the proximal part of the appendix, or at its juncture with the caecum. If the original infection then dies out or remains of so low an intensity as to stimulate the mucous-secreting cells without leading to further attacks of acute appendicitis the appendix becomes distended with mucous and as the pressure within the now closed viscus rises, hernial protrusions of the mucous membrane project through the muscular coat and form diverticula which are recognizable as spherical swellings beneath the peritoneum. Such distention of the appendix may increase slowly until the organ reaches many times its normal size, or may at any point in its progress be cut short by the rupture of one of the diverticula. If this occurs, the mucous is discharged into the peritoneal cavity, the appendix collapses, and the process begins anew. This sequence may be repeated at periodic intervals for many years before it causes symptoms or physical changes sufficient to achieve clinical recognition. The extruded mucous is not absorbed by the peritoneum, but becomes encapsulated, in the form of droplets or larger masses, by the omentum or by the growth of connective tissue produced by local plastic peritonitis. In the course of time, the ab-

\*Presented before the Montgomery County Medical Society, Coffeyville, February 25, 1938.

domen becomes distended by gelatinous masses initiating a condition known as pseudomyxoma peritonei.

While inflammation is an established factor in the production of mucocele, mechanical obstruction occupies a place of equal importance, as supported by the experiments performed on rabbits by Naeslund<sup>12</sup>. The appendix in each instance was ligated at its base, and resulting mucocele was histologically identical with that found in man.

Hudacek<sup>13</sup> reported a case of femoral hernia in which wide-spread pseudomyxoma peritonei was found upon operation. The hernial sac contained both caecum and appendix. The latter was distended with mucus and showed signs of mechanical obstruction of the lumen.

According to Elbe<sup>14</sup>, the factors responsible for the development of mucocele are: (1) "A gradual obliteration of the lumen of the appendix at one or more points, (2) the absence of gross infection, (3) a mucosa which is capable of active secretion of mucus, or a state of affairs in which absorption is less than secretion and (4) distention."

Deaver<sup>15</sup> observed that the portion of the appendix distal to a circumscribed obliteration becomes distended and filled with fluid.

#### SYMPTOMS

Mayo and Fauser<sup>3</sup> studied seventy cases and concluded that there were no diagnostic points referable to mucocele of the appendix.

The disease may pursue a painless course, with nausea and vomiting the only symptoms, or, in fifty per cent of the cases, pain may be experienced in the

right lower quadrant. A palpable mass is present in about one-half the cases, and in seventy-five per cent, abdominal rigidity is in evidence.

#### DIAGNOSIS

With the single exception of the case reported by Vorhaus<sup>16</sup> in 1930, mucocele has remained undiagnosed preoperatively. X-ray, following a barium enema, may show a filling-defect of the caecum and appendix; however, such a finding is not constant and therefore cannot be considered as pathognomonic.

Among the conditions often confused with mucocele and pseudomyxoma peritonei, of appendiceal origin, are: (1) Metastatic colloid carcinoma, (2) Pseudomucinous cystadenoma of the ovary, (3) Carcinoma of the caecum, (4) Ovarian cysts, (5) Enteric tuberculosis, (6) Uterine fibroids, (7) Adnexial complications, (8) Empyema or hydrops of the gallbladder, (9) Retroperitoneal hernia, (10) Prostatic kidney, (11) Gastrointestinal conditions, (12) Terminal ileitis, and (13) Intestinal obstruction. So it is evident that mucocele presents a difficult problem when regarded from the standpoint of differential diagnosis.

#### PATHOLOGY

The smallest specimen on record measured 5.5 cm. by 2 cm., the largest 11.25 cm. by 4.4 cm. Many authors have described their specimens as being "as large as a coconut" or "as large as an man's head", but in no instance were actual measurements given.

Grossly, the cysts are yellowish, grayish, or white in appearance with a dull, glistening surface. The

Fig. 1 & Fig. 2. Views of mucocele of the appendix described in case report.





contents may vary from mucoid, colloid, gelatinous, pseudomyxomatous, or a putty consistency, to a watery, purulent, or serous character. When viewed microscopically, the cystic contents have no structure, unless of the heaviest type, when fine, fibrous tendrils are observed. Chemically it reacts positively for pseudomucin.

In shape the mucocèles are globular or fusiform, resembling a stomach, sausage, corkscrew, a letter "S", or a banana.

Diverticula are sometimes seen springing from the cyst walls or from the wall of the dilated appendix.

Histologically, the walls of the appendix may appear very thin in places; the muscle fibers being partially or entirely replaced by connective tissue. The mucosa is very much thinned out and may have undergone complete atrophy. The columnar epithelium is flattened to a low cuboidal shape or may be absent. In most cases the glands also have undergone marked atrophy. There is a profuse round-cell infiltration throughout the wall and calcareous deposits are noted in different atrophic layers. The walls show changes of chronic inflammation with thickening, round-cell infiltration, or fibrosis, according to the acuteness of the inflammatory changes.

#### TREATMENT

The treatment, of course, should be directed toward careful removal of the cystic mass, in order to prevent peritoneal or omental transplants of mucin cells.

#### CASE REPORT HISTORY

The patient was a white woman, thirty-three years of age, who complained of a "constant ache" in the lower left quadrant of the abdomen.

Three years ago she experienced the first attack of abdominal pain, which began in her right side and lasted about three days. Since that time, the pain had assumed a migratory nature, being felt at intervals in the right and left sides and seemingly more intense during menstruation.

#### FAMILY HISTORY

The family history was negative for such familial diseases as diabetes, epilepsy, insanity and blood dyscrasias. Her father is living at the age of eighty-three. Her mother died at the age of sixty-three of Bright's disease.

#### PAST DISEASES

The patient had no illnesses, other than the usual childhood diseases of measles, mumps and whooping cough.

#### MENSTRUAL HISTORY

The menses, which began at the age of eleven, have always been irregular or delayed, and have been

attended by considerable pain and cramping. The duration was seven days; and the flow was profuse. There was no spotting between periods, but the menstrual blood had been noted to contain clots.

#### OBSTETRICAL HISTORY

The patient had one child, seven years of age, of normal birth. She had never had a stillbirth or miscarriage.

There had been no previous operations.

#### PHYSICAL EXAMINATION

Examination revealed a well-nourished white female, thirty-three years of age, who did not appear acutely ill. Examination of the eyes, ears, nose and throat disclosed no pathology. The heart and lungs were normal. The abdomen was free from scars, and was tender to deep palpation in the left lower quadrant, and in the midline below the navel. No rigidity was present.

Because of the excessive deposit of adipose tissue in the anterior abdominal wall, it was difficult to palpate the intra-abdominal structures. However, resistance was encountered in the left lower quadrant, suggestive of a mass.

#### PELVIC EXAMINATION

Examination revealed a cervix in the normal position. There was tenderness in both fornices, and a distinct mass, which was firm but moveable, was encountered in the left. Inspection of the vagina showed no marked abnormalities. Discharge from superficial cervical lacerations was moderate.

#### LABORATORY DATA

The erythrocyte count was 4,200,000 and the leukocyte was 7,300.

Urinalysis was negative for sugar, albumin, and casts.

The blood Wassermann was negative.

The patient was admitted to the Coffeyville General Hospital, and a laparotomy was performed under ether anaesthesia.

#### OPERATION

The abdomen was opened through a low midline incision. A large cystic mass, identified as the appendix, presented itself in the wound, and was removed with great care. The caecum was partially resected in order to amputate the mass well beyond the base. The closure was made with two rows of Lembert's sutures.

The caecum was exceedingly redundant and mobile, and could be withdrawn from the wound with the greatest of ease. This probably accounted for the location of the appendix in the midline.

The left ovary, which was enlarged and cystic, was removed in its entirety, by clamping and cutting the infundibulopelvic ligament. The right ovary was normal and healthy in appearance. No fluid or

mucinous substance was found in the peritoneal cavity or in the pouch of Douglas. The abdomen was closed in layers.

#### DIAGNOSIS

Cystic ovary and appendix.

#### PATHOLOGY

Gross. The specimen consisted of an appendix which measured  $9\frac{1}{2}$  cms. in length by 3 cms. at its maximum diameter. The serosal surface was smooth, moist and glistening, and the sub-serosal vessels were fairly distinct. There appeared to be innumerable small, reddish brown petechiae scattered over the surface. The appendix was distended with fluid, was fluctuant, and could be transilluminated.

Microscopic. The wall of the appendix seemed somewhat thickened. The muscle layer showed considerable hyaline degeneration and flattening out. There was no epithelial lining seen. No mucosa was visible. No inflammatory reaction was observed.

#### DIAGNOSIS

Mucocele of the appendix.

#### SUMMARY

Our case was one in which a mucocele of the appendix was an incidental finding at operation. The patient, however, gave a history that would indicate previous subacute attacks of appendicitis.

The extreme mobility of the caecum would account for the apparent migratory nature of the pain.

Recovery was rapid and uneventful.

#### CONCLUSIONS

1. A case of mucocele of the appendix has been reviewed because of its rarity and because of the interesting diagnostic problem it presented.

2. Mucoceles are seldom diagnosed prior to operation. They are of great clinical importance, because of their potential malignancy, as manifested by the development of pseudomyxoma peritonei.

#### BIBLIOGRAPHY

1. Dodge, G. E., *Annals of Surgery*, 63:334-343, 1916.
2. Davison, M., *International Clinics*, 2:303-309, 1926.
3. Mayo, C. & Fauster, J. N., *Minnesota Medicine*, 15:254-256, 1932.
4. Dannreuther, W. T., *American Journal Obstetrics and Gynecology*, 31:342-349, 1936.
5. Werth, Arch. of Gynak., 23:431, 24:100, 1884.
6. Rokitsansky, C. F., *A Manual of Pathology and Anatomy*, Philadelphia, Blanchard and Lea, 2:89, 1855. (Published in Vienna in 1842).
7. Virchow, *Die Krankhaften Geschwulste*, 1:250, 1863.
8. Fere, *Progres Med.*, Paris, 5:73, 1877.
9. Castle, O. L., *Annals of Surgery*, 61:582, 1915.
10. Lazarevic, *Zentralblatt f. Chir.*, 55:1877-1880, 1928.
11. Fraenkel, F., *Munchen Med. Wehnschr.*, 48:965-970, 1901.
12. Naeslund, M. S., *J. Upsala Lakaref Forh.*, 34:1-219, 1928.
13. Hudacesk, E., *Arch. f. Klin.*, 155:694-702, 1929.
14. Elbe, *Beit Z. Klin Chir.*, 155:694-702, 1909.
15. Deaver, J. B., *Appendicitis*, Philadelphia, P. Blakiston's Sons & Co., 360, 1913.
16. Vorhaus, M. S., *Journal A.A.A.*, 94:165-169, 1930.
17. Vorhaus, M. S., *Wisconsin Medical Journal*, 25:390, 1926.
18. Easton, R. E., *Medical Journal and Record*, Dec. 5, 463-466, 1933.
19. *Atlas of Path. Anatomy*, *British Journal of Surgery*, 21:81-84; 351, 1933-34.
20. D'Aunoy, R. E. and Fine, A., *American Journal of Cancer*, 22:59-65, 1934.
21. Peterson, R. F., *Northwest Medicine*, 33:328-330, 1934.

22. Dewey, J. E. and Wakeman, J. N., *Journal of Missouri State Medical Association*, 31:227-229, 1934.
23. Jackson, A., *Wisconsin Medical Journal*, 8:633, 1936.
24. Abdanski, S., *Zentralblatt f. Chir.*, 29:1717-1720, 1936.
25. Meleny, F. L., *Annals of Surgery*, 103:457-561, 1936.
26. Jones, R. E. and Carmody, M. S., *American Journal of Surgery*, 32:511-515, 1936.

## RHABDOMYOSARCOMA OF THE TESTICLE

M. Gerundo, M.D.\*

W. W. Corwin, M.D.\*\*

Topeka, Kansas

Rhabdomyosarcoma has always been considered a rare tumor. It is found occasionally arising from skeletal muscles, from the heart and from the testicle. In this last location few tumors have been reported in the literature. Recently Hertzog reported two cases and reviewed the literature of the few tumors reported in this country and in the foreign literature.

Rhabdomyosarcoma arising in the testis has almost always its origin from a previous embryoma or teratoma of the organ. There are a few cases in which the tumor itself arose from paratesticular tissue, spermatic cord, cremasteric muscle and other muscular elements inside the scrotum, but these are exceptions and the most important are those originated from the testicle itself.

We had the opportunity to examine a recent case and follow a complete study of the original growth as well as of the metastases found at the post-mortem examination.

#### CASE REPORT

This patient, C. D. a white male seventy years of age. A large tumor had been observed involving the left testicle for many years. Eventually this tumor became so large that the patient was no longer ambulatory. Physical examination was essentially negative at that time with the exception of the large scrotal tumor. This patient was operated on March 26, 1936 under local anaesthesia. The large tumor, which was lobulated, was then removed. A firm capsule surrounded the tumor and this was firmly attached to the spermatic cord. Following this operation the patient made an uneventful recovery.

About one year later the patient began losing in weight and became weak. Two small nodules could be palpated in the left inguinal region. X-ray examination of the spine and long bones was negative. X-ray of the chest was negative. The patient ran a downhill course and expired September 7, 1937.

Twice before death a Friedman test was performed

\*Pathologist Topeka State Hospital,

\*\*Resident Surgeon, Topeka State Hospital,



on the urine but results were negative in both instances. In the second examination, a larger amount of urine was injected with the result of a slight congestion of the ovaries.

Post-mortem findings were: Numerous small nodules from the size of a pea to that of a cherry were scattered over the parietal and visceral peritoneum. The liver was studded with numerous small whitish nodules similar to those found in the peritoneum. A rather large mass involving the lombo-aortic glands was located just below the inferior margin of the pancreas in the retro-peritoneal region. The mass was about the size of a fist, its shape approximately spherical, the consistency rather succulent, with numerous areas of necrosis and softening. Two nodules were felt in the left inguinal region, which on removal appeared to be similar in appearance to the nodules found in the abdomen.

Gross Examination: The tumor, about the size of a fetus head, weighs 990 grams, and is irregular on surface, with several prominences, although coarsely of a globular shape. It is surrounded by a thin membranous capsule, on removal of which the surface appears smooth. On close observation the tumor has preserved the testicular shape and appears to be appended to a pedicle by an hilus formed by a depression surrounded by the various prominences which can be compared to lobes. In proximity to the so-called hilus is found the only cyst, about the size of a walnut.

The dimensions of the tumor are in the largest diameters, 17 cms. x 14 cms. x 13 cms. On section the appearance of the tumor is variegated, being made up of numerous small nodules of varying shape and size, with a large peripheral zone, of a compact, uniform and elastic texture. Between the numerous whitish or grayish nodules, showing a fibrillar structure, are present more abundantly opposite the hilus, numerous nodules of a yellowish color, which appear well circumscribed and separated from the surrounding tissue by strands of dense fibrous tissue.

Microscopic Examination: The tumor shows a varied aspect, as is usually found in embryomas. Although no organoid structures are present, many tissues are represented. Areas of myxomatous tissue, with here and there numerous condensations of the tissue and formulation of islands of precartilaginous tissue, are predominant but no adult cartilage is present. Intermixed between these areas, sometimes separated from them by dense strands of fibrous acellular tissue, are nodules or zones of nervous tissue and fibers, areas of active capillary formation, areas of lymphocytes and areas in which the cells have an epithelial appearance, but no tendency to form any special structure. Very occasionally such

cells show a tendency to form tubules or lumina. Other uncommon areas show the formation of fat cells from large indifferent cells, with large pale nucleus and dark staining nucleolus.

A large portion of the tumor, occupying particularly the periphery, where no definite nodular structure can be made out, is made up of polymorphous tissue, in which large giant cells are predominant. In these areas three cellular types are clearly evident. The type more often encountered is a spindle cell, with elongated plump nucleus, surrounded by an acidophilic cytoplasm and long fine fibrillar processes. The processes, by intermingling between them, form rather a thick network in which the cellular bodies appear embedded. Another type of cell is round, small, with a dark nucleus and acidophilic cytoplasm, resembling a lymphocyte, except for the size, being generally larger than a lymphocyte. The third type, which is also characteristic under low power, is the giant cell. Sometimes measuring 100 micra or more, the giant cells present a fantastic shaped nucleus or multiple nuclei, and an acidophilic cytoplasm. In the sections stained with iron hematoxylin and with silver some rather rudimentary striations or fibrillar structures are evident in the cytoplasm of these cells. However, no definite striated muscle is found, indicating a certain grade of immaturity of the tumor. Striations are also observed occasionally in the spindle cells, showing that there is a definite relation between these various types of cells.

The connective framework is difficult to make out; however, with Mallory's stain, it is evident that a fine fibrillar network is present and surrounds almost every cell. These precollagenous fibers are originating from the thick bundles of collagen fibers which divide or occasionally run through the tumor tissue. The arrangement of the cells is rather irregular and disorderly, although in most fields where the spindle cells are prevailing they seem arranged in bundles and occasionally tend to form syncytial masses. The large giant cells are irregularly scattered between the spindle cells and sometimes are more numerous in certain areas than in others.

The metastatic growths are all similar. They are made up of spindle cells with large nucleus and long fibrils. Some areas show bundles of cells, recalling a syncytial appearance, other areas show few cells scattered in necrotic areas or embedded in thick collagenous fibers. Their size varies as well as their shape. Although large cells with a polymorphous nucleus are present, the giant cells of the original growth are absolutely absent. The number of mitoses is, however, greater in the metastases. No cross-striations are seen here although the numerous



fibrils originating from the cell, clearly indicate their muscular character. The collagenous fibers, numerous in some areas, are scarce in others, where only precollagenous fibers are seen surrounding the single cells.

In the metastases the tumor shows more marked signs of immaturity, as often is the case with malignant tumors. From the study of the metastatic nodules only, it would be difficult to gain an exact idea of the nature of the tumor which appears formed now only by immature cells of the primitive mesenchyma.

#### COMMENT

A rhabdomyosarcoma, arising from the testicle in an elderly man who had been for twenty years or more in a psychiatric hospital. In the tumor under examination it was only by multiplying the number of microscopic sections that the true nature of the tumor was found. The tumor was evidently bidermal, as the tissues involved were epithelial and mesenchymal. No adult tissue was found, as is the usual case in such tumors. The cartilaginous tissue, which many authors report as usually present in the testicular teratomas, was absent and only islands of precartilaginous embryonal tissue were present.

Rakow, who has given one of the best descriptions of the rhabdomyoblastomas, states that giant cells are always present in these tumors and their presence is sufficient to affirm the diagnosis. In the immature types of tumors, the cross striations may be very faint or absent, but their absence will not enable one to reject the diagnosis of rhabdomyosarcoma. The origin of the giant cells is rather uncertain and although considering them necessary both for the diagnosis and at least a phase of the development of the muscle fibers, it is hardly possible to fit them into the scheme. However, it is to be pointed out that even in myosarcomas originating from smooth muscle fibers we have always a constant feature the presence of giant cells of some sort. Rakow states that the cells originate as a result of amitotic division in an already degenerated cell. However, the presence of giant cells with a nucleus similar to megakaryocyte or the prepolykaryocyte evidently is an objection to such a point of view. It is probable that such plasmodia-like giant cells originate by fusion of numerous cells, as is evident in the common type of foreign body giant cells. It must be borne in mind, however, that sarcomas of any tissue, and particularly the muscular, show always giant cells of the tumor type.

In the metastasis the plasmodia-like cells were absent and instead, the growth was mostly formed by the spindle cells which we have already described, and the round cells, with no differentiation of stri-

tion. It is often seen that a metastasis may present a more juvenile type of cell and in our case, the cells could be classified as belonging to the embryonal mesenchyma. The presence of fibrils originating from the spindle cells and their oxiphilia are the only findings in favor of their myoblastic nature. No trace of the other tissues originally included in

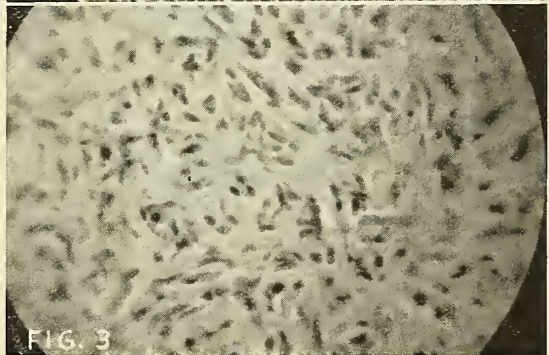
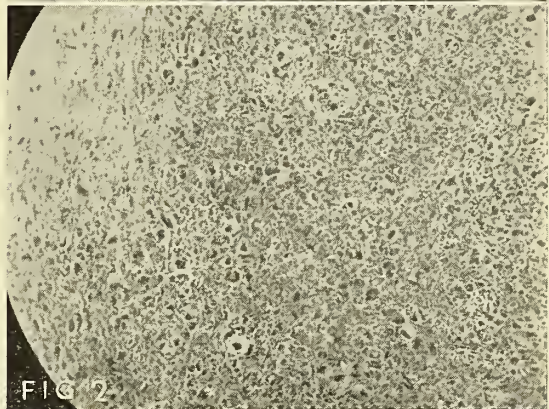
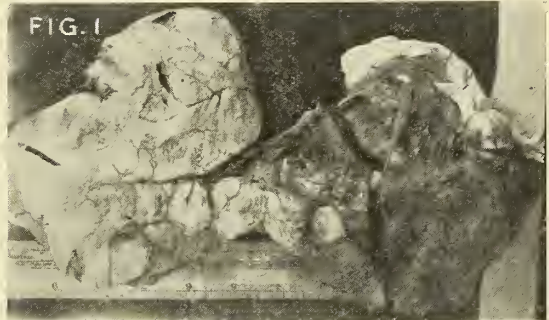


Fig. 1. Tumor of the testicle, gross specimen.  
Fig. 2. Typical rhabdomyosarcoma of the testicle.  
Fig. 3. Aspect of the metastatic growth.

the teratoma were found in the metastases, reaffirming the conception at the time of the first examination that possibly the rhabdomyosarcomatous portion was the only one to account for the growth and the malignant character.

In our case we could not elicit a history of any previous trauma. The mental state of the patient has been a hindrance to a complete study of the



cause. Mörpurgo, however, also recently reported a tumor of the testicle in a patient who consulted the physician only because of pain in the right epigastric region and precisely in the region of the gall bladder. At the examination there was found a mass in this region and an enlarged tumor of the scrotum. The patient had noted the enlargement of the scrotum for several months, but could not remember of any reason or trauma to explain the gradual enlargement. In the case of Mörpurgo, the tumor was rather complex, as it showed a tridermal embryoma with development of an adeno-sarcoma of the renal blastoma type and adenoleiomyoma with carcinomatous degeneration.

Trauma was evident in the history of the first case of Hertzog, while no trauma was present in its second case, relative to a young boy of sixteen years of age.

It is rather difficult to understand why a quiescent teratoma which had not given signs of its presence in the course of a long life, arises and starts to proliferate unlimitedly. Of course, such a question of origin is true for many neoplastic diseases and we think that also in our case the origin remains a mystery, such as surrounds the origin and development of many tumors.

### SUMMARY

A case of rhabdomyosarcoma of the testicle in a man seventy years of age has been described. The tumor originated in a dysembryoma and in the original growth the presence of bidermal tissues was made evident by the study of the numerous sections.

In some giant cells a cross-striation was seen. The tumor metastasized and the microscopic examination revealed a spindle cell growth of the myomatous type and not any other disembryomatous elements.

### BIBLIOGRAPHY

- Di Stefano—Histogenesis and Classification of Malignant and Benign Rhabdomyomas, *Tumori*, 10, 293, 1936.  
 Ewing, Neoplastic Diseases, Page 234, W. B. Saunders, 1928.  
 Frank, Enfield, Miller—Rhabdomyosarcoma of the Neck, *Annals of Surgery*, 104, 341, 1936.  
 Hertzog—Rhabdomyosarcoma of the Testis, *American Journal of Cancer*, 28, 131, 1936.  
 Lunghetti—Anatomia Patologica, Edited by Foa, Page 30, U. T. E. T., 1922.  
 Letulle—Anatomie Pathologique, pages 206 Masson et C. ie, Paris, 1932.  
 Menetrie—Le Cancer, pages 1067 Baillere et fils, Paris, 1927.  
 Mörpurgo and Blavet—Rarissimo caso dit tumore complesso, maligno, del testicolo, *Archivio Scienze Mediche* 61, 511, 1936.  
 Rakov—Malignant Rhabdomyoblastomas of the Skeletal Musculature, *American Journal of Cancer*, 30, 455, 1937.

The changing times and the many onslaughts by social and other theorists necessitate new lines of offense and defense in professional practice. Proper union between the members of the medical, dental, pharmaceutical, and also the nursing professions would go far in making for better protection of the public health, and at the same time aid materially in the maintenance of professional standards and aims.—California and Western Medicine, August 1937.

## THE TREATMENT OF LOW BACK PAIN\*

M. E. Pusitz, M.D.

Topeka, Kansas

### INTRODUCTION

So many theories have been offered to explain pain in the back and its treatment that the student finds himself confused. The medical profession, as a whole, has become a sort of football for the legal field and has suffered greatly in prestige in the eyes of the public. We have allowed the bracemaker, the drug clerk, and the corset woman to influence us, forgetting that they have no concept whatever of anatomy, physiology, and pathology. We have been busy devising operations but have neglected a field which can be most helpful by proper use of knowledge which has accumulated over generations. It was in this country that contributions standardized the differential diagnosis of low back pain; and laid the foundation for modern treatment; and yet in this country little use is made of this knowledge as compared with European countries. A careful history and examination, and a very painstaking roentgenological check-up form the most important step to successful therapy.

The spinal column is complicated with numerous articulations and subarticulations, which give a propensity for all kinds of disorders. The unit is the vertebra, and motion occurs in the intervertebral articulations. The articular facet forms, with its fellow of the opposite side, sections of surfaces which are spherical. The centre of motion lies outside of the joint surfaces. Therefore motion occurring in these joints is of a gliding nature. The centre of motion lies within the intervertebral disc, in the nucleus pulposus. Since the articular facet motion is a sliding one, motion would be of three degrees of freedom of motion were it not that there are other provisions for restriction. The intervertebral disc consists of a fibro-cartilaginous ring and an elastic centre. The annulus fibrosus has a lamellar arrangement with fibers running in all directions because the structure has to sustain stresses from all sides.

The nucleus pulposus is a gelatinous mass, highly elastic, and capable of changing its form and position within the centre of the fibrocartilaginous ring. Because of its elasticity it opposes a considerable resistance to compression. This function also insures that not undue stress or pressure will be effected on the intervertebral articulation; which this latter is

\*Presented before the staff of Menorah Hospital, Kansas City, Mo., December, 1937.

not built to withstand. Also this very elasticity insures the excellent gliding motion in these articulations. The anterior and posterior ligaments of the spine, in the upright position, are under definite tension due to the elasticity of the nucleus pulposus. The fact that makes real motion possible is the adaptability of the nucleus pulposus which can change shape and shift its position. Theoretically, there are four types of motion possible between vertebrae: 1. Longitudinal motion; compression and extension is extremely limited. 2. Rotation about a longitudinal axis. 3. Flexion. 4. Side bending.

In 1925, Danforth and Wilson noted that: The intervertebral foramen between the fourth and fifth lumbar vertebrae is the smallest; the fifth lumbar nerve root is usually the largest and is directly anterior to the articulation between the fifth lumbar vertebra and the sacrum; effusion within the joint might easily cause compression; hyperextension of the spine caused the superior articular facets to be driven upward toward the intervertebral notches of the vertebra next above, and in this way diminished the size of the intervertebral foramen and this might conceivably compress the nerve to some extent. In 1929, Ayers pointed out the thinning of the intervertebral disc below the fifth lumbar vertebra in backache. Putti emphasized the articular facets in 1927. Recently Williams pointed out the great liability for this disc to be injured. He emphasized the fact that with degeneration of the disc, or thinning, whether due to trauma or other cause, there was no longer the elastic force tending to keep the vertebrae apart. As a result there is a settling of the vertebrae, with a consequent sliding of the articular facets past each other, constricting the intervertebral foramen. There is as a consequence also a sort of subluxation of the articulation, with the tendency for locking as stressed by Mennell. Also, as a result of the load being placed on these subluxated joints there is the development of a traumatic arthritis. I believe Williams has placed too much stress on this form of pathology. But he did make an important contribution. Moreover he emphasized the roentgenological investigation since not only is there a narrowing of the intervertebral space but as a result, there is a sort of posterior subluxation of the fifth lumbar vertebra; this has been denied by Willis, but I have seen many cases which confirm the view of Williams. The latter finds that the fifth lumbar root is the most frequently involved.

The funiculus, or that part of the nerve root which traverses the intervertebral forearm, does not lie within the arachnoid as does the intraspinal portion of the nerve. It is covered by a prolongation of the dura mater, around the circumference of which is a rich venous plexus. The nerve at this site is not

protected by the cerebrospinal fluid, and is, therefore, more liable to external injury. The plexus of veins is also subject to irritation from the surrounding foramen, and undoubtedly a traumatic inflammatory congestion results at this site following any mechanical irritation. This will explain much referred pain.

### COCYGDYNIA

It is essential that a correct diagnosis be made. So many cases treated for this are really disturbances of the joints higher up. Determine whether the pain is due to movement of the coccygeal joints; whether there is displacement; or sensitive ligaments attached to the sides; or a fibrous deposit between the anal orifice and the tip of the coccyx; or painful hemorrhoids; or rectal disease. If the coccygodnia follows acute trauma, it is important that during this acute stage the coccyx be manipulated firstly to correct what displacement may occur, and secondly to prevent the formation of adhesions between the joints. The manipulation may have to be performed under anaesthesia, if too much pain is present, and it consists of inserting the index finger in the rectum, the thumb being placed outside on the dorsal aspect. Even if there be no displacement, the full range of motion should be carried out to make sure no locking has taken place. The finger in the rectum should be placed sufficiently high up to insure motion taking place at the sacro-coccygeal junction. Movements should consist not only of antero-posterior but slight rotatory movements. This may be repeated every three days or so until there is absolute comfort. If the case is not received until long after the injury, manipulative measures should still be tried first unless by rectal examination it is found that there is almost right angled displacement, and the motion in the coccyx is negligible, and this deformity verified by x-ray. Manipulation is performed in the same way as described. It may cause much pain temporarily. This may be followed with some heat and massage, the latter tapering off into vibration massage. An anaesthetic is required for the first, but may not be required for subsequent manipulations. In those cases received late, where the deformity is great, especially in females, the author advises excision of the coccyx. If the diagnosis is correct, the procedure is most successful. Poor results have been due to errors of diagnosis and poor indications. Many of these cases are neurotic; but do not place too much reliance on the diagnosis of psychoneurosis, unless all findings are negative. If the symptoms are due to a sensitive deposit, this is almost invariably situated between the tip of the coccyx and the anus. By placing the index finger within the rectum, the



sensitive deposit can be grasped between the thumb and index finger. Gradual friction massage is used. At times there is much pain in the region of the coccyx, yet there is no deviation and no displacement. Some consider that there is a locking of some joint, or pressure neuritis affecting the small nerve filaments which lie in the periosteum, or there is a chronic periostitis, or adhesions in the joints. In certain cases, the use of vibration massage is sufficient; in others manipulation of the coccyx works wonders; in others all measures fail except excision.

### SACRO-ILIAC STRAIN

The more complicated a structure, the more prone it is to derangement. Just as one may sprain the knee joint or the ankle joint, so one may sprain one or more joints of the spine. Here, however, owing to the mechanical set up, there is bound to be more serious disturbance. Also due to the proximity of nerve roots to the intervertebral articulations, and the sacro-iliac joints, one is prone to get root disturbance and referred pain. The sacro-iliac joint is held by massive ligaments so that gross displacement can not occur. But owing to the auricular contiguous surfaces being irregular, mild displacement with locking is quite possible. This could not be shown in the x-ray due to the difficulty of getting a lateral view of the joint. Displacement does not take place in vertical direction; but there is a rotatory movement, resulting in torsion of the joint if no actual displacement. By proper tests one can determine whether this torsion is backward or forward. The logical method of treatment is manipulation, a specific adjustment being made so that if there is anterior torsion, the manipulation produces the opposite movement. It is the theory held by Mennell. If pain is experienced both on anterior and posterior torsion tests, then one is dealing with a severe sprain of the joint, especially if this has followed trauma. In such case, the first essential of treatment is immobilization.

A sprain may be considered as being a rupture of ligaments in a minute or microscopic sense. Some of the fibers of the ligament may be torn and separated. There is hemorrhage, and this is followed with the usual inflammatory reaction consisting of exudation of fluid and infiltration of the region with connective tissue cells. The inflammation may be entirely absorbed, or it may end in scarring, and the formation of adhesions. The sprain produces severe pain; muscle spasm splints the area. The healed ligament is thickened and contracted; there may be adhesions around it. Any movement now which stretches it is both limited and painful. This may apply not only to the ligaments but to the muscles, tendons, bursae of the region.

Jones and Lovett prevent adhesions by: 1. Allaying all inflammatory symptoms by rest and the removal of strain on the injured parts. 2. Obstructing local effusion of blood by pressure. 3. Massaging the injured structures early. 4. Delaying passive movements for a few days and then practicing them in such a way as to avoid stretching torn structures. 5. Encouraging early active function. 6. Protecting torn structure from the strain of body weight.

Leriche, on the other hand believes prevention of adhesions the more important. He starts off with active motion, possibly aided with physiotherapy. In order to carry out this regime he may even inject novocaine into the joint.

With these principles in mind we may formulate in acute sacro-iliac sprain, whether this be due to muscular effort or to injury. There are many, probably the majority of, mild sprains in which physiotherapy will be sufficient. The history and physical examination will determine which will be suitable. A severe sprain does not fall in this group. Rest and physiotherapy are recommended. No support and the injury should not be stressed to the patient. Active movements should be kept away from for several days. In more severe cases, and in those where the above fails, the surgeon must follow the tenets of Jones. Rest is emphasized. I have found that adhesive or mole skin strapping is uncomfortable and prefer the use of the belt. However, if strapping is to be applied, a technic is followed. The strapping has a tendency to slip and should be renewed the next day. It is only used for the first forty-eight hours. If it is required longer than this, then obviously the strapping is not efficient; moreover, the patient will develop a tender skin if he does not get an adhesive burn. If the patient feels much improved at the end of forty-eight hours, then physiotherapy is instituted. Active motion is guarded until the patient has had no pain for some days, and then postural exercises are practiced. If these can be performed without pain, then the patient can resume his ordinary labors. If a belt should be used, or if the strapping gives some relief but not enough, then certain principles in fitting should be adopted. The most important region which has to be held by the belt is below the crests of the ilia, down to the greater trochanters. The usual mistake is to fit the belt too high up near the waist. In fact, an efficient strapping of the sacro-iliac joint may be performed with a strip about three inches wide encircling the proper region. It is best that the belt should cover as large an area as possible posteriorly, but this is not required anteriorly. The usual back support, which is narrow posteriorly, and wide anteriorly is incorrect for the immobilization of the sacro-iliac joint. In a distinct sacro-iliac sprain with

no other involvement, this will suffice. But if, as so often happens, the patient has also sprained the sacro-lumbar joint, or the joints even higher up, or if there be much muscle spasm of the erector spinae muscle mass, then the sacro-iliac belt will be inefficient. The patient should be at rest in the more severe sprain. In bed, be sure and relax the hamstrings by a pillow under the knees, and protect the lumbar curve by a pad. The mattress should be rigid. The triad of heat, massage, and active motion is stressed. They form the basis of treatment. It is senseless to expect simple infra red heat alone, or the use of diathermy, or the use of short wave to cure low back pain. They will relieve, yes; cure, no. The triad, however, has been found most useful.

Manipulation can not have much value in the treatment of an acute sprain unless there is definite locking, but this should require very little force. The sooner efficient treatment is instituted, the more likely there will be success and the sooner this will be achieved. Continued strain leads but to the development of further and further reaction, with involvement sooner or later of the nerve roots. Moreover, with further and further reaction there is joint injury which sooner or later results in traumatic arthritis, a much more difficult lesion to deal with. In the more severe forms, the corset or belt will give insufficient support, and the brace may have to be considered. In a small percentage of severe cases, the brace will not be sufficient, and in these cases, I apply a plaster of Paris cast. The amount of time given to absolute immobilization will depend upon the experience of the surgeon, the severity of the injury, the response of the patient. It is much better to err on immobilizing too long rather than run the danger of a relapse. In all cases, there is later instituted physiotherapy, then active motion, then work. A corset or brace may be used after removal of the cast.

#### CHRONIC SACRO-ILIAC STRAIN

Manipulation of joints is as old as the hills. It is referred to by many of the older authors. It has been practiced by the bone-setters long before the various cults were heard of. Jones and Lovett state that adhesions should be broken down where: They do not yield to passive movements; passive movements are followed by pain and reaction; the saving of time is important.

Bankhart's theory has to do with the formation of adhesions. His technic is therefore one in which motion is produced to the extreme so as to break up these adhesions. I practice this to the greatest extent, and follow my manipulation immediately with heat and massage and muscular exercises, the triad already mentioned. Over three hundred manipulations of

the spine have been performed, many of them under anaesthesia. The results have been most gratifying.

Mennell follows the theory of breaking down adhesions, but also considers joint locking. The question of joint locking is a perplexing one since it cannot be definitely shown by x-ray in the sacro-iliac joint. I have frequently demonstrated joint locking in the cervical spine. Here manipulation is specific. If there is anterior torsion, then posterior torsion is practiced. The intervertebral articulations have been considered and it is apparent that only a slight slip could result in locking. Another explanation of locking is to liken the joint to that in the driving wheel of an engine. There is a point, the dead point of this driving wheel. We can all recall that if the driving wheel is stopped at a certain point, no amount of energy expended by the piston will move the wheel. Now if the wheel be but slightly rotated by hand, or if levered just over this dead centre, the engine again begins to function well. Nothing, however, has slipped out of place. In this type of manipulation there is no intention of breaking up adhesions; no intention of reducing dislocation only the intention of levering over this dead centre. This brings out another method called the springing of the joint. The joint is put through the extreme of motion, and then a slight extra motion is given to accentuate this. As a result there is a distinct snap or pop due to the slight separation of the surfaces. This locking produces muscle tension, strain, and traumatic reaction or inflammation, as a result of which root pain may occur. We would do well to analyze these cases rather than to ridicule them. I have certainly had cases where I have tried every measure but to fail, and this one was successful. The triad of heat and massage and exercises serves here as well as in the above.

Manipulation is not the only procedure for relief. It is most essential that proper roentgenological investigation be made. Naturally fractures are treated by immobilization. In sacralization of the fifth lumbar vertebra the elongated transverse process may have nothing to do with the pathology. On the other hand, it may form a lever which causes a greater proportion of movement to take place on the other side resulting in sprain by some movement or trauma. There may be pain on the sacralized side due to impingement of tissues between the transverse process and the sacrum. The inequality of motion on the two sides may result in locking. Obviously locking can be corrected by manipulation; but it can recur. I believe that these are better not manipulated at all, and if manipulation is performed, then it should be followed by support, in addition to the usual triad. In fact, there is always the tendency for recurrence, hence it is wise to add some support



later periodically when the patient is taking violent exercise. Where the symptoms are those of an arthritis as well as strain, and where the x-rays shows arthritic changes, the support is more indicated. This does not mean that a sprain can not occur in an arthritic joint; in fact, this makes the joint more prone to be sprained. Nor does it mean that manipulation has no place in the treatment of an arthritic joint, as long as the arthritis is long quiescent. When there is both forward and backward torsion strain of the sacro-iliacs, as evidenced in the physical examination, the indication is for support rather than manipulation. The belt previously considered in the acute stage or for prophylaxis is not sufficient. Since the process has continued for some time, there is much spasm of the erector spinae muscle mass. As a result there is tendency to increase of the lumbar curve. The result is not only strain of the sacro-iliac joints but also of the sacro-lumbar. This tension therefore affects all three.

The posterior fitting is by far more important than the anterior. Be sure that the corset is wide behind, and narrower in front. The abdominal supports are incorrect; they have a wide front and a narrow band behind; this can only aggravate the lordosis which is produced by spasm of the erector spinae. The more severe the case, the more stability will be required. The support should extend at least from the buttocks to well above the lumbar curve. The higher the corset goes, the more the stability, and in the very severe cases with much muscle spasm, I use the regular corset which extends from the buttocks to the shoulder blades. If there is tendency to round back, the addition of shoulder straps will aid materially. In order to apply proper support to the lumbar curve, a lumbar pad is inserted. The straight pad advised by the corset people is inadequate. One must use a terraced felt pad, which can be made best from layers of felt, sewn together, the whole surrounded with a chamois covering. The stays of the ordinary corset will be sufficient only for the milder cases; the more severe cases will require metal strips, on either side of the spine, which should be slightly curved to conform to the lumbar curve. This corset is the basis on which there is superimposed the sacro-iliac belt. The reason for this is that it is very difficult for the usual corset to be made to run so low as to encase the buttock region well and yet be fitted properly for the lumbar curve. Moreover, the sacro-iliac belt if properly applied, will cause the flexible stays in the corset to be bent when the patient sits thereby preventing the corset from being pushed upwards when sitting. If the corset still does not give quite enough immobilization, then one can incorporate bars, patterned after the simpler braces.

Leather belts are usually inadequate and are not as easily worked with as the corsets, and much more expensive. The use of a broad back plate is the first step, but it alone is insufficient. One must have means of re-enforcing its action by pressure in front of the pelvis. The simple use of bands around the body would result more in lateral compression, than antero-posterior. The addition of a front or abdominal plate marks the beginning of all simple braces. By properly shaping the abdominal plate, stability can be increased. The back plate should conform to the lumbar curve and should extend from just above the buttock level to the upper limit of the lumbar curve. If a brace is used, then I prefer one which will include all the features mentioned, and yet which will be one integral unit. The Steindler modification of the standard body brace is such a unit. It can only be properly made from a plaster model of the patient. These braces give the greatest support of any of which I have knowledge.

There is then an important place for support—in some cases it is the only indication possible; in others it may be combined with manipulation; and in still others it may be used as after treatment. The brace is not intended forever. After a period of time, and this varies with the severity of the lesion and how soon treatment was instituted, the brace is gradually replaced by a corset. All during the time, physiotherapy is cautiously applied. Finally active exercises are instituted as before.

It is surprising to note how frequent postural disturbances either cause or definitely aggravate these conditions. Make a careful study of posture from the feet to the head. Analysis of the occupation of the patient; correction of foot disability; tight heel cords; one leg shorter than the other; distinct malposture; the posture of the patient at work, especially in dentists, stenographers, etc., all of these details may spell success or failure if their treatment be not included.

#### SACRO-LUMBAR STRAIN: ACUTE

Physiotherapy will relieve the majority of mild cases. The triad of heat, massage, and active motion at the proper time holds. In a number of cases, this will be insufficient. Here strapping may be instituted, following a definite technic. Manipulation holds a very doubtful position here. Mennell stresses locking, and has devised specific technic. I have used this but not with great success.

#### CHRONIC LUMBO-SACRAL STRAIN

Mennell considers locking and has for this certain manipulations. If there are any congenital anomalies then manipulation should be performed with care; and it may be necessary to follow this up with some support. The reasons for this have already been

stressed. Aside from the correction of locking, manipulation offers a low percentage of successes, and this is admitted by Bankhart, who still considers adhesion involvement in the ligaments between the spinous process of the fifth lumbar and the sacrum. Since he cannot budge these ligaments by manipulation, he performs open operation and cuts them. I have performed this in three cases and only one had relief. I feel that Bankhart is wrong when he states that the treatment with support is apt to result in failure. It is essential that the support cover a large enough area. It must go to the buttock region. The higher up it goes the greater the stability, but is must at least include the whole of the lumbar curve. The abdominal wall is an important factor, but the abdominal corset or belt so frequently fitted has a narrow band behind. The result is that the curve can be but accentuated, increasing the deformity. The use of stock braces, not conforming to the lumbar curve, is productive of trouble. For what happens is that the lumbar spine will be forced into just the opposite curve, in fact there may even be a reversal of the lumbar curve. Physical examination will reveal whether the lumbar curve should be reduced or increased and this will govern the use of the lumbar pad. Moreover, the lumbar pad should not be a rectangular block as is usually the case, but it should be terraced to conform to the lumbar curve. Where there is reversal of the lumbar curve, the object is manipulative correction; this fails in many of the cases. One then uses a corrective support. Do not try to correct this at one stroke. Make the support conform to the curve already present, and then by means of the lumbar pad which is gradually increased, the deformity is corrected. The principles of fitting are essentially as already given, and if there is a sacro-iliac lesion superimposed or along with it, then the sacro-iliac belt is added. The height of the brace depends upon the severity of the lesion, the delay in treatment, and the amount of muscle spasm present. It is also stressed that the triad of heat, massage, and muscle exercises accompanies supportive treatment.

### TREATMENT OF SCIATICA

Primary sciatica is rare. Secondary sciatica is common. The diagnosis is extremely important. General conditions such as diabetes, syphilis, gout, toxic neuritis due to alcohol, lead or arsenic; tumors of the spinal cord, meninges, or cauda equina; neurofibromas of the nerve; pelvic tumors or metastases; vascular diseases; etc., will not be considered. The other forms resolve themselves into mechanical disturbance which has resulted in traumatic arthritis of the intervertebral articulations; or narrowing of the intervertebral foramina; or inflammatory condi-

tions as in arthritis which may not only involve the joints but also the nerve roots. We shall not go into diagnosis but suffice it to say that a good history and physical examination and proper x-rays will go a long way. At times, correct diagnosis is difficult or impossible. Obviously, if the cause for the sciatica can be determined then the most effective and correct form of treatment is to eliminate this cause. If the origin of the sciatica is a sacro-iliac strain, then the correction of this should be the source of relief. In my experience, manipulation of the spine for chronic sacro-iliac strain with sciatica does not carry the same success as when the pain is limited to the joint without radiation. However, most will respond to a combination of manipulation, physiotherapy, the triad, and support. The method of manipulation of the spine, especially after the technic of Baer, which was called a stretching of the sciatic nerve, and followed by the application of a hip spica cast, does not attract me as much as the method of manipulation followed with the triad, and possibly a support. Rest is a more important factor in sacro-iliac lesions accompanied with sciatica; one must take care of the normal lumbar curve, and to relax the hamstrings as before. If traction is added to this, in the form of Buck's traction, the result is amplified.

Where etiology cannot be established, or where usual methods fail, one can have recourse to a series of palliative measures. Injection into the sciatic nerve, as a palliative measure, does carry a certain percentage of success. I have not found the method as brilliant as claimed. Hertzler used 30 cc. of a one per cent solution of quinine and urea hydrochloride, and he injects into the nerve at the point where it crosses the neck of the femur. Feiling uses 100 cc. of normal saline; Harris recommends that the injections be made at one of two points—one is just above the sacro-iliac notch, and the other is at the level of the tuberosity of the ischium. If the author uses injection of the sciatic nerve he combines it with the other measures already considered. This method is not without danger.

The method of epidural injection was reported by Sicard in 1901. He used procaine hydrochloride in saline; Feiling used forty per cent solution of antipyrine. However, I have used saline solution with as much success. In doing this, I use about 80 cc. of normal saline, but the first 20 cc. consists of two per cent procaine solution in saline. It is not usual to find resistance against the injection until about 80 cc. are injected, and since no greater success follows greater injections, I limit to this. Success therefore, does not depend entirely on the amount or the character of the fluid injected; the usual theory is that there has occurred a stretching



of the nerve roots due to the accumulation of fluid in the epidural space. Epidural injection I have found decidedly more useful than injection into the sciatic nerve; but only for sciatic radiation not for low back pain. When I use this mode of therapy, it is combined with the other procedures already mentioned.

Labat and Greene introduced a palliative measure for intractable pain. It is in no wise curative and consists of paravertebral alcoholic nerve block. The particular nerve roots to be blocked are worked out from the neurological examination. They do not inject more than 5 cc. of ninety-five per cent alcohol, in any individual, and use the fluid for injection of no greater concentration than thirty-three per cent in one per cent neocaine solution. The doses vary from 2-10 cc. per nerve. I have used this method in four cases. It is indicated for the relief of root pain; and is not treatment for low back pain. When it is used, it is combined with the other measures.

Injection of alcohol in the spinal canal is likewise a palliative measure for root pain. It was first described by Dogliotti in 1931. He injects 0.2-0.4 cc. of absolute alcohol into the cerebrospinal fluid at the level of the roots involved. The patient is stretched out on the side opposite to the painful side, in decubitus. By raising the pelvis 10-20 degrees, the alcohol reaches the sacral roots; if the trunk is elevated, it turns towards the thoracic roots.

Woolsey, in Keen's system of surgery, considers neurolysis of the sciatic nerve, not intra-neural, but rather he states that stretching alone may be sufficient to free the nerve from internal adhesions, which he believed not an infrequent cause of sciatica. In 1922, Taylor described an exploration of the sciatic nerve in chronic peripheral neuritis. He frees the nerve from the surrounding structures but did not stretch it. As a routine, their measures cannot be recommended.

The use of roentgenotherapy is questionable. It is true that it can ameliorate or lessen inflammatory reaction and hence is useful adjunct in arthritic syndromes. The use of foreign protein therapy has had advocates in similar cases. It is decidedly questionable, but worth while. The same may be considered with reference to foci check and elimination; the use of vaccines; attention to the elimination of the patient; the use of colonic irrigations, etc.

Williams has recently stressed the pathology of the fifth lumbar disc, already considered. He opens up the intervertebral foramen by flexing the lumbar spine, in accordance with the views of Danforth and Wilson. A cast is applied with the spine so flexed. Milder cases are allowed ambulatory, but

the more severe cases are put to bed with the spine flexed and the hamstrings quite relaxed. Manipulation in these cases is naturally not a method of choice, and in certain cases might be productive of harm. Application of a cast or brace which accentuates the lumbar lordosis would but tend to increase symptoms. After a week or two of the cast, this is replaced with a lordosis brace. This is a three point pressure brace, and is productive of much success, when properly indicated. This brace may have to be worn for many months. With this muscular exercises eliminate the lumbar lordosis; when this is accomplished the patient is allowed to go free. When symptoms are restricted to one extremity the use of a lift on the shoe of about a half inch is very useful, since this tends to open the intervertebral foramen on that side. It must be used with caution, however, since it might be productive of symptoms on the other side.

If the roentgenogram shows complete loss of the lumbosacral disc there will be recurrences. In these cases operative intervention may be the only way to permanent relief. This is done by a facetectomy whereby the intervertebral foramen is enlarged. This has been considered by Putti; also by Ghormley. It must be remembered that a facetectomy only cures the root pain, and is not the cure of the original cause. Therefore, this may have to be accompanied or followed by a fusion of the lumbosacral joint.

#### OBER'S OPERATION

Ober has recently drawn attention to contracture of the ilio-tibial band. This can be explained from William's hypothesis that it tends to increase the lumbar lordosis. If this is so then it is obvious that it can only play an important role in a limited number of cases. The test is made as follows: The patient is placed directly on his side. The examiner places one hand on the pelvis to steady it and grasps the patient's ankle lightly with the other hand, holding the knee flexed at a right angle. The thigh is abducted and extended in the coronal plane of the body. If the contracture is present, the leg will remain abducted, the degree of abduction depending upon the amount of contracture present. This sign is present in both the conscious and anesthetized patient; if it is negative, obviously there is no indication for the operation. It can but be an adjunct in treatment anyway, and therefore must be combined with other measures. The treatment is tenotomy or section of the band.

#### TRANSVERSECTOMY

Reference to the transverse process as an essential cause for root pain was made by Richard and Lav-

ieri in 1919. In 1923, Moore reported cases in which removal of the offending transverse process resulted in relief. Bauman in the same year made a similar contribution. Since then there have been sporadic reports of this nature, but recently this problem has been stressed less and less. I performed this operation in only one case—five years ago—with relief. I have not performed it since, and I do not believe that it is required but rarely. With reference to the removal of an offending transverse process after fracture, I do not believe that these give any trouble *per se*. If trouble remains after fracture of the transverse processes of the lumbar vertebrae, this is due to injury of the soft parts and not to the fracture *per se*. The importance of diagnosis is evident.

#### OTHER OPERATIVE PROCEDURES FOR RELIEF OF PAIN

Heyman has recently considered a dissecting operation which releases the iliac or upper origin of the gluteus maximus muscle, or that portion which is inserted chiefly in the fascia lata. It also removes a portion of the iliac attachment of the short and long posterior sacro-iliac ligaments. He believes that this relieves pain in two ways: 1. By releasing the tension of the muscle and the strain at the site of the muscular or ligamentous attachments. 2. By relieving muscle spasm. Very few operations of this type have been performed. Freiberg has recently attacked the piriformis muscle, but again the value of the operation is problematical.

In 1921, Gaenslen described pain due to ilio-costal impingement. The diagnosis can be definitely established since the pain can be reproduced at will by the patient if the diagnosis is correct. A brace may suffice to prevent this impingement; if not, then resection of ribs is the method advised. The author has had one such case which received definite relief after varying diagnosis and treatment from different surgeons. This is sometimes seen as severe intercostal neuralgia in severe scoliotics; the therapy is similar, and was described by Painter many years ago.

#### ARTHRODESING OPERATIONS

Ten years ago a wave of enthusiasm engulfed the country. At first this was reserved for cases where all other measures failed. Then more radical surgeons began to consider it a method of choice. The consensus of opinion is that the arthrodesis of a joint, be it the sacro-iliac or lumbo-sacral should be advised with great caution. If the measures already outlined are carefully prescribed, the number of surgical arthrodeses will be small. Where all meas-

ures carefully prescribed do fail or give insufficient immobilization; or where the pathology is such that only recurrences can be expected, as in spondylolisthesis, flattening of the disc below the fifth lumbar, severe arthritic involvement but localized to the joint, it is a method of choice. Much care is essential that the proper diagnosis be made; it is insufficient to operate on one sacro-iliac joint when the sacro-lumbar is involved as well. All three joints may have to be fused; an operation of some magnitude if performed at one sitting. It must be determined at diagnosis whether or not the intervertebral articulation must be attacked so as to increase the space in the intervertebral foramen. Contra-indications for operation are: 1. Incomplete therapy with reference to conservative measures. 2. Infections or multiple arthritis. 3. Compensation cases before settlement. 4. Elderly or poor risk patient. 5. Female patients before puberty.

The author has noted, and he has seen frequent reference to the fact, that after performing an arthrodesis of the sacro-iliac joint, the patient feels better after a lapse of a week or so. There can be no true arthrodesis of the joint for a few months; therefore, one can not be sure that relief is entirely due to the arthrodesis. It is true that arthrodesis affords the most perfect form of internal fixation there is; that if the diagnosis is correctly made, this will give definite relief. In certain types of cases, notably spondylolisthesis or prespondylolisthesis, it is the method of choice, in fact the only method which gives possibility for cure.

---

The oral, clinical, and pathological examinations of the American Board of Obstetrics and Gynecology for Group A and Group B applicants will be held in San Francisco, California, on Monday and Tuesday, June 13 and 14, 1938. An informal dinner for the Diplomates of this Board, their wives and others interested in the work of the Board, will be held at the Palace Hotel, San Francisco, on Wednesday evening, June 15, 1938, at seven o'clock. Dr. William D. Cutter, Secretary of the Council on Medical Education and Hospitals of the American Medical Association, will address the group, and the successful candidates of the preceding two days' examinations will be introduced in person. Tickets at \$2.25 each, may be obtained in advance from Dr. Joseph L. Baer, 104 S. Michigan Avenue, Chicago, Illinois, or at the door. Reservations should be made in advance if possible. Application for admission to the June, 1938, Group A examinations must be on file in the Secretary's Office before April 1, 1938. Application blanks and booklets of information may be obtained from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania.



## PRESIDENT'S PAGE

To The Members of The Kansas Medical Society:

The scheduled meetings to discuss economic and legislative problems were postponed during the special session of the legislature. As soon as the executive secretary catches up with his office work the meetings will be resumed. Timely notice will be sent to members in the localities, and I urge you again to attend these meetings.

No bills of particular importance to the medical profession were introduced during the session. I was impressed by the statement of a prominent attorney who is frequently in Topeka. He said:

"I sometimes envy your organization in its work in that I wish that I had two thousand men with an important following whose support could be secured on short notice when I make some request or suggestion on pending legislation."

I wonder if there is not another fact of importance, and that is the advantage of being on the right side of any proposition or legislative proceeding. In many years of personal observation of the activities of medical men in groups I cannot recall an instance but where their efforts and influence were on the side of human right, and for the best interest of the health and well being of society. Doctors as individuals or in small groups may seek for selfish ends but in large groups this does not take place. As the years pass I feel certain the medical men of our state will be alert to such measures which concern the health and well-being of our people.

J. F. Gsell, M.D., President.

---

## EDITORIAL

---

### WHY SURVEYS?

Preliminary reports are now being received of the United States Public Health Service survey. At an approximate cost of four million dollars and consuming two and a half years, W. P. A. reporters under the direction of social workers have investigated 740,000 city and 36,000 country homes. The findings are supposed to strike an average for the entire population of the United States. The survey was supervised by Dr. L. R. Thompson, Director of The National Institute of Health. The results of the studies are for the purpose of providing information as to the basic medical requirements in the United States. It is intended to show particularly the medical needs of the lower income groups. In industry the survey is said to be of use in working out safety programs. It purports to aid industry and labor organizations in establishing the amount of time lost due to illness and accident.

The publicizing of information obtained in the survey will have an educational value only as it is interpreted. It is desirable to know the amount of sickness and disability. For this purpose we had the costly survey of the Committee on the Cost of Medical Care. Now we have the Public Health survey. The facts concerning illness and the availability of good medical care is to be studied again in an extensive survey by the American Medical Association.

We may continue to survey and analyze; but until an educational campaign is developed and sustained, the public will not be prepared to accept good medical service, regardless of how it is organized and administered. The relation of poverty and ignorance to the health of the population is such that there can be no solution of the medical problem until the whole population is prepared through education to accept with intelligence the broad conception of health, with its economic and social implications.

### PUBLICITY IN MEDICINE

A conference of science writers\* was held at the headquarters of the American Medical Association

in Chicago, October 30, 1937, presided over by the president of the Science Writers' Association, Mr. Waldemar Kaempffert, who is an editor of the New York Times. In opening the meeting, Mr. Kaempffert made a short address in which he discussed the relation of his organization to the medical profession and he opened wide the gates for a generous discussion of the question. Mr. Kaempffert did not mince words. He declared that what goes on in medical laboratories has come to be news—news that the public wants to read and know about. This is true to such an extent that certain writers for the lay press specialize on this material, and most of them do a very good job of it. Frequently these writers find themselves stymied because of the medical code of ethics; too often they seek information only to be told that it cannot be given because of the code. As Mr. Kaempffert bluntly put it, "Medicine is the only profession that is muzzled. It is muzzled by itself. There is the utmost freedom of speech, thought and expression among chemists, physicists and engineers, but not among medical men." He also said that, "Medicine is also the most pretentious of all the professions, and the least scientific. It gives itself far too many airs; it gives itself airs because it has what it calls 'ethics'." He declared that the medical man with a real news message is prohibited from giving the story to a newspaper because of this code of ethics while the quack, with no ethical qualms, "makes" the news page. However, Mr. Kaempffert is of the opinion that this barrier is breaking down a bit, an opinion with which we agree.

Last October, Dr. Charles Goodrich, president of the New York State Medical Society, said: "Any group dependent upon the people for their daily bread should feel that what is good for the public is good for them. Today, the modern group in business and industry, as well as education and science, makes an effort to interpret itself to the public. Organized medicine alone must not remain cloaked in an inscrutability sure to be misunderstood." This comment expresses very clearly the thought that is in the minds of medical leaders everywhere. Organized medicine senses a growing demand for authentic information on health problems, and from whom can these answers come except from the physician? Many of our state organizations have answered the question to some degree by naming committees to

\* Science Writers' Conference. J. A. M. A. Organization Section, January 1, 1938, page 1B, and January 8, 1938, page 10B.



take care of this important matter; Indiana long ago pioneered in this through the organization of our Bureau of Publicity, a committee known throughout medical America for the work it has done and continues to do. New York organized a Public Relations Committee which is doing a monumental work, and other state societies are falling in line and in a short time we hope to see every state organization enlisted in this work.

It is fitting that such information should come from an official committee rather than from individuals. The medical profession is made up of human beings and, this being so, there is within our group a small number who would take advantage of such situations if the bars were let down and the result would be that a great deal of harmful misinformation would reach the lay press.

The National Association of Science writers, composed of those who regularly supply news stories of what is going on in the scientific world, stands ready to cooperate to the fullest extent. Its members have declared themselves in favor of going directly to official committees for their information and they have every right to expect accurate, authentic information from these groups. Further, we believe that our larger county medical societies would do well to name a committee for this purpose. In the smaller communities, the press has become interested in health problems and reporters constantly are asking individual physicians for opinions. All such information, of course, should be credited to the county medical society, and not to an individual.—*Journal of the Indiana State Medical Association*, February, 1938.

---

## EYE, EAR, NOSE & THROAT

---

### THE VALUE OF TINTED LENSES\*

Lyle S. Powell, M.D.

Lawrence, Kansas

It is exceedingly important to the ophthalmologist in the examination of the human eye that he consider it as a projection of the brain; a receptive ap-

paratus infinitely complicated and consisting essentially of specialized neuro-epithelium which receives visual impressions from the outer world and transmits them by means of a conducting mechanism, partly insulated (medullated) and partly non-insulated (non-medullated) to the higher centers. Not the least complicated part of this intricate mechanism is the process of light and dark adaptation. All are aware of certain pathological conditions that increase the sensitivity of the eyes to light, producing a marked photophobia. Just as this is true in a pathological case, so is it true in the normal individual. The threshold for light and dark adaptation varies markedly. On the one hand we have the individual who is definitely allergic to light and who displays such manifestations as asthma and urticaria.

They are apparently entirely comparable to the individual who displays a dermatographia of the skin. At the other extreme we have the individual who is quite comfortable in the bright glare of the tropical sun.

It is also well known that ocular pigmentation has a great deal to do with light sensitivity. In general, those with considerable pigment have a greater threshold for light and glare than those with less pigment. The great classification in this regard is the simplest one, namely, blonde or brunette. This classification may with justification be carried still farther and all eyes classified fundamentally as either blue or brown. The admixture of races and individuals over countless generations has produced various modifications, but generally it may be said that those having a good deal of pigment in the skin and hair also have a good deal of pigment in the iris and retina and choroid and the color of their eyes will be brown. Conversely, the blonde individual will generally have blue eyes. The extremes are of course on the one hand the black negro and one the other the true albino.

Another factor must be taken into consideration, namely, that our eyes are theoretically at rest when gazing into the distance, and are in an increased state of kinetic energy when looking at near objects. Nature has mercifully provided an adjusting mechanism which compensates for this condition in most of us. As we gaze at near objects, the pupil in the normal eye contracts and a less amount of light is permitted to enter the eye. However, it seems that nature never intended that we should pore over books, magazines, music and intricate handicrafts for hours at a time. At least, for a great many of us under unnatural lighting conditions our comfort threshold is broken down and more or less severe ocular symptoms result.

Another thing that nature did not provide for was artificial light. Throughout the centuries the human

\*A considerable amount of the material presented is from an article by Louis Lehrfeld printed in the *Archives of Ophthalmology* June, 1935, Vol. 13, pp. 992-1013, and from the *Correspondence Department of The Journal of the American Medical Association* July 28, 1934, Vol. 103, pp. 276 and 277.

eye has been adjusting itself to daylight and to darkness. Sunlight, of an average intensity, at mid-day, approximates 9,000 foot candles and in the shade 1,000 foot candles. It would be a very difficult task indeed to simulate such intensity with artificial light. When we step from the evening darkness or semi-darkness into a brilliantly lighted room of infinitely less candle foot power than that of the shade during the daytime, practically every one experiences, at least momentarily, an uncomfortable sense of glare. Unfortunately, most of our public buildings, offices and homes are so illuminated that the light source or sources are within the direct line of vision. At least they impinge upon peripheral vision.

This brings us to one of the major factors in eye discomfort. All are familiar with the late Professor Fuchs', of Vienna, routine methods of examining the eye. One of the steps in this routine was to place the patient before a window and observe the reflection or image of the window upon the cornea. When this image lies over the pupillary area of the cornea, it is impossible for the patient to see clearly. Quite comparable to this is the experience of working at a highly polished desk or one with a glass top, with a direct light source on the desk. The light may be moved in such a way that when one looks at the desk a glare is experienced and it will be impossible to see things clearly upon the desk. This is because the image of the light source is reflected from the desk in such a way that it falls upon the cornea, on the pupillary area, and a certain amount of the light is being reflected. When we are in a room that contains several light sources, especially artificial light sources, we are more apt than not to be in a position where one or more of these images falls on or near the pupillary area, resulting in serious confusion and at times intense eye discomfort. It is not necessary however, that these images fall directly upon the pupillary area in the case of a person wearing glasses. The ordinary lens has two polished surfaces, the one next the eye and the one opposite. Light sources from in front at all angles will be reflected upon the anterior surface of the ophthalmic lens. Light sources coming from the side and a little to the rear will be reflected upon the posterior surface of the lens. Glare and confusion may result.

When we wish to obtain comfort for close work with an artificial light source, we have been taught to place it so that the light will fall over our left shoulder upon the object of our gaze. It might as well fall over our right shoulder except for the predominance of our right-handed population. In this way the light source becomes practically indirect or at least the image of the light source reflected from the posterior surface of the lens does not impinge upon the pupillary area. In this manner most

of us attain a certain degree of comfort. There are certain persons, however, whose individual threshold of tolerance to light and light confusion is so low that this one single source reflected upon the peripheral part of the retina may cause extreme discomfort. This is particularly true, apparently, in the cases of young people of high school and college age, whose pupils are normally larger during accommodation than those of more advanced age.

This hyperesthesia of the retina may be responsible for considerably more of what we call eyestrain than we have previously thought. It is well known that involuntary muscle does not tire in the same sense as does voluntary muscle. For instance, in glaucomatous eyes it is a common practice to keep the pupil contracted as small as possible for sometimes months and years often without any symptoms that may be attributed to the chronic state of contraction of the involuntary muscle. What then, to do about the individual who has been given the proper correcting lenses and seems perfectly normal in every other respect but still has considerable discomfort, especially on doing close work? Manifestly, the first and the best thing to do is to simulate natural lighting as nearly as possible, but even with competent indirect lighting the numerous reflecting surfaces of articles of furniture, walls, etc., may produce secondary light sources just as do reflecting surfaces in nature such as pools of water, rocks, clouds, etc. Obviously, then, the intensity of the light permitted to enter the eye must be decreased.

Many optical companies have made extravagant claims for their particular brand of tinted glass. This has resulted in much confusion on the part of prescribing oculists. A great deal of investigative work has been done on the transmissibility of light by different sorts of glass, including clear optical glass, smoked glass and various tints and shades. It is said that clear optical glass transmits from eighty-nine to ninety-one per cent of the light, the rest being lost by reflection. This is a point that may explain some of the comforts received from glasses of low strength prescribed, perhaps under protest, by every oculist of any experience. It is said that smoked glass A absorbs from ten per cent to twenty per cent of the visible spectrum while smoked glass D absorbs from eighty per cent to ninety per cent.

At this stage in our consideration we must be careful not to think of glare and light as synonymous terms. Glare, as previously described, could be defined as any brightness within the field of vision of such a character as to cause discomfort, interference of vision, or eye fatigue. The problem, then, is to decrease the amount of light just enough to alleviate the symptoms. Much laboratory work has been done on the spectral analysis of the light transmitted by



the many various tinted lenses on the market. The difference between the well known brands of tinted lenses in this respect is not great. A lens should be selected that transmits as even a distribution of all the spectral components as possible. It is impossible to apply laboratory standards to individual cases. The patient can only judge in terms of comfort rendered him. It is, therefore, advisable, in such cases, to prescribe a lens that will just render the patient comfortable and permit him to tolerate his environmental conditions. Each person must be regarded as having his own normal light tolerance, which may be very different indeed from his fellow living under exactly the same conditions.

---

## CANCER CONTROL

---

### CARCINOMA OF THE BREAST

W. M. Mills, M.D.,

Topeka, Kansas

The importance of this disease is apparent when we realize that cancer of the breast is second only to cancer of uterus in frequency and that in 1931 there were 10,540 deaths from malignant lesions of the female breast reported in the United States. In twenty years the mortality has increased from 5 per 100,000 to 8.9 per 100,000 in our registration area, due in part to the fact that a larger portion of the population now reaches adult life than formerly.

While it is incumbent on the medical profession to sponsor actively the movements under way to provide lay education concerning cancer it is also necessary for the profession to keep itself informed on all advances in its treatment. We should also inform ourselves accurately on what is being accomplished by the time tested methods before adopting a new method which does not adhere to certain fundamental principles. These principles as applied to the surgical treatment of malignant lesions of the breast are based on the theory that the disease is first a local affair which later extends by the lymphatics to distant organs. If this is correct the possibility of cure depends on the stage of the disease when operated, the type of the surgical procedure performed and the grade of malignancy determined by tissue examination. The stage of the disease when the case reaches the surgeon will depend on the intelligence of the patient and the alertness of the first medical adviser consulted by the patient. As Bloodgood has pointed out lay education increases the number of early cases seen so there is an increased responsibility in diagnosing cases before

definite clinical signs of malignancy have developed.

Practically the surgeon sees two groups of malignant breast cases. The first group includes cases in which the definite clinical signs of cancer are present and an immediate radical amputation is indicated. The usual picture will be that of a single firm painless tumor in the breast tissue to which the skin is attached. Enlarged axillary glands may be present or absent. In the second group a positive clinical diagnosis can not be made, so a surgical removal of the tumor for microscopical examination is necessary with radical operation immediately following a diagnosis of malignancy.

"Cases of mammary carcinoma are considered inoperable, (a) when the growth is attached to the ribs or sternum, (b) when the supraclavicular nodes are involved, (c) when the axillary lymphatic glands are fixed, (d) when it occurs in a fulminating or acute form, (e) in cancer en cuirasse, (f) in the presence of distant metastasis in lungs, pleura, abdominal viscera and bones, (g) when constitutional reasons contraindicate a severe surgical operation." (Cheatele.)

Surgical treatment of an operable lesion may be reinforced by x-ray treatment either pre or post-operative and it is especially indicated in breast malignancy in young individuals, in cases developing in pregnancy and in rapidly growing highly cellular growths. Were it not for the fact that many breast tumors are radio-resistant, x-rays would be used in all cases. There is increasing evidence to show that postoperative and to a lesser extent pre-operative x-ray therapy increases the number of five year cures and it is to be hoped that the future approach will be a combined attack with the surgeon and roentgenologist supplementing each other.

"The question of the efficacy of pre- or post-operative radiation therapy in the treatment of malignant tumor of the breast has nothing whatever to do with the proper or improper surgical care administered to a patient affected with such a tumor. In our present state of knowledge radiation therapy, either x-ray or radium, does not justify the slightest lessening of the thoroughness or radicalness of the operative removal of the malignant breast and its associated pectoral and corresponding axillary region." (Rienhoff.) Generous sacrifice of skin adjacent to the tumor and painstaking axillary dissections will yield improved results.

Studies by Harrington indicate that in 3,740 cases radically operated the percentage of five year cures was 40.9 per cent which is especially satisfactory since his standard of operability was not rigid. Of this group 32.5 per cent had no axillary involvement at the time operated and in these the five year percentage was 72.5. The remaining cases with glandu-

lar involvement showed the five year percentage of cures to be 26.9 per cent.

Any treatment yielding such results justifies a rigid adherence to the principles and technique which have made it possible and stimulates us to add to it every improvement of scientific merit.

## X-RAY TREATMENT OF BREAST CANCER

Arthur K. Owen, M.D.

Topeka, Kansas

Today in treatment of cancers of the breast, radiation has an important place. In the United States, at least, x-ray has almost wholly supplanted radium in treatment of these cases.

Roughly, cancers of the breast may be divided for purposes of treatment: (1) those cases in which there is no evidence of any physical involvement of either the skin, the under lying muscle, or the axilla; (2) Those cases in which the tumor mass has invaded the skin; (3) Those in which the skin is involved with more or less ulceration, and with extensive metastases in the axilla.

The first group probably should be treated by surgery first, followed by a series of post-operative x-ray.

The second group probably are treated best pre-operatively by x-ray, then removed surgically, this to be followed by postoperative x-ray.

The third group are in general inoperable when seen in this condition. Massive x-ray dosage offers the patient a very considerable amount of relief, and appreciable life extension; and it may produce so favorable a reaction that the case may later become operable.

There should be the closest co-operation between the surgeon and the radiologist in all cases of breast cancer. The best results cannot be obtained with each acting without this co-operation. I believe that every case of cancer of the breast should be operated upon, and the breast removed, if this is possible. I as firmly believe that some of these cases are distinctly benefited by pre-operative x-ray treatment, as well as by post-operative treatment. Choice of treatment is much better determined by surgeon and radiologist together. Many of the poor results heretofore obtained have been the result of this lack of co-operation.

The procedure to be used by the roentgenologist in his work is far from being settled. For the pre-operative treatment more is done at around 200 kv. than by all other methods combined. Many of the larger clinics in the country do not use more than

from 125 kv. to 140 kv. in post-operative treatment. Many men are equipped with 300; 400; 600; 800, or even 1000 kv. There is no evidence to date that any such kilovoltage has any added benefit over the lower kv. used in general at the present. What the future will bring forth, no one knows, but do not let this lack of finality deter the use of whatever x-ray is available in your locality.

Statistics from many of the larger medical centers in the United States, over the past six or seven years, show very conclusively that those cases of breast cancer which are treated both by surgery and by x-ray have much better results than those treated by surgery alone, and that the percentage of those remaining free from recurrence at the five year period is approximately double those by either method alone.

Again, let me say that the best results will be obtained when the surgeon and the radiologist work together.

---



---

## LABORATORY

---



---

### DIAGNOSIS BY BIOPSY

M. L. Jones, M.D.

Wichita, Kansas

Within the past few years, the general public has become cancer conscious as a result of the work carried on by the various women's clubs throughout the country and agencies for the control of cancer as well. The next few years will see an ever increasing movement toward the obliteration of this dreadful scourge. As a direct result of these various factors being at work to bring about cancer control, it will unquestionably mean the taking of biopsy specimens in increasing numbers in the future.

It is a well-recognized fact by the informed medical profession, that if anything is to be done on the control of cancer, the biopsy must be taken early. The majority will also agree that where there is any reasonable doubt about a lesion, as to whether or not it is malignant, that if control is to be in any degree effective a biopsy specimen is absolutely imperative. This immediately raises the question as to the degree of danger involved with respect to the production of metastases in doing a biopsy if the lesion in question should be malignant. After all, the problem resolves itself into this, that if the lesion is benign, no particular harm has been done by taking a biopsy and if it is malignant, the sooner it is known the better it is for all concerned. If the lesion is malignant, the hazards of a biopsy are not



nearly as great as waiting and allowing time and the future clinical picture to tell the story. The past has very well demonstrated the inadvisability of the latter point. It is only in those cases in which diagnosis of malignancy is made early that a hopeful prognosis can be made and even then the experienced doctor will guard well his promise as to the patient's future.

When done with the usual precautions which characterize good surgery, of today, the removal of a biopsy specimen may, generally speaking, be considered relatively free of hazards or complications. It requires however, a very careful selection of the proper site for the removal of the specimen on the part of the operator. The questionable lesions will all fall into one of three gross types. They may protrude above some surface (papillomatous), they may be ulcerative, or they may exist as a nodule within some organ. If they are of the papillomatous type, it is absolutely essential to obtain the specimen at the deepest portion of its base, or its site of attachment in the surface from which it is growing. A specimen taken anywhere else is practically worthless. In the ulcerative lesion, it is best and usually easier to obtain the specimen in the ulcer margin so as to include some of the lesion and some normal tissue beyond the ulcer markin. Those lesions which are characterized by a nodule below a surface, or within an organ, are of course best handled by a complete excision for their proper examination.

The size of a specimen is not nearly so important as a judicious selection of its site of removal. A specimen properly taken may not be more than 1 to 2 mm. in thickness and only 3 to 4 mm. in depth and breadth and still be entirely satisfactory for examination. Specimens removed by the scalpel are always much more satisfactory for examinations as the electric knife and cautery produce much distortion of cell structure and detail. Where the latter procedures are used a larger specimen should be taken if possible. After removal the specimen should be placed immediately in a 1 to 10 dilution of formaldehyde as obtained from a druggist. It should be placed in at least ten times its weight of solution.

In summary, it may be said that biopsies are becoming of increasing significance in the efficient control of malignancies. The information obtained from one which has been properly removed is invaluable. The judicious selection of the proper site of removal is imperative. A very small piece of tissue properly selected is entirely satisfactory for microscopic examination.

Visit the Hall of Health, Wichita, May 7 to 16.

---

## TUBERCULOSIS CONTROL

---

### AIDING THE WORK OF THE KANSAS TUBERCULOSIS ASSOCIATION

Charles H. Lerrigo, M.D.\*

Topeka, Kansas

Physicians have always led the way in the fight against tuberculosis. A handful of doctors giving special attention to tuberculosis, shocked at the appalling number of deaths and confident that education of the general public as to the causes of tuberculosis would go far towards the eradication of the disease formed the group who founded the National Tuberculosis Association in 1904. They had the definite purpose of spreading health education and preventing tuberculosis. They found much to do for their process of education included "the public, the medical profession, and the patients themselves". The twentieth century drop in tuberculosis death rates per 100,000 population from 204 to fifty-five undoubtedly is due, in great measure, to such research and guidance. In our state the Kansas Tuberculosis and Health Association and its seventy-six affiliated local societies, all are part of the national body. Everything that it has to offer, every advance the national association makes in the crusade against tuberculosis, is extended to us so far as we can take advantage of it.

Undoubtedly, the greatest impetus to the work against tuberculosis has been the guidance of the physicians who were its founders and their successors. But next in importance is the development of the well known symbol of the unique Christmas Seal which has proven to be the most successful of any fund raising plan ever proposed for health work.

In Kansas every large county now has the advantage of a county tuberculosis association, which spreads out beyond its county seat into the remote parts of its territory. Physicians have always been friendly and helpful in the work. In late years there is a specific requirement that the county tuberculosis association shall include in its membership one or more medical advisers who shall represent the county medical society.

There are certain lines of tuberculosis work which are distinctly matters of social welfare, matters in which the lay members of the committee, assisted by county or school nurses, can best be responsible for its activities. While this is especially pronounced in fund raising and disbursement of funds,

\* Executive Secretary, Kansas Tuberculosis & Health Association.

it is equally forceful in making contacts with the general public as to educational matters and arranging for such opportunities as diagnostic clinics. The lay members of the tuberculosis association have a definite advantage in promoting such work because none can bring against them the charge of self interest, which might be directed against a physician. Furthermore, they are able to make direct approaches to those who are "contact cases", or for other reasons may be suspected of needing special help to fight tuberculosis, by inviting such people to present themselves for examination and treatment. They also have opportunities to assist in setting upon his feet the discharged patient who cannot return to his old, strenuous employment and greatly needs guidance and help in making a living. All of these things are the particular work of the layman.

The physician who will work in connection with his local tuberculosis association finds plenty to do. He is to be a counsellor, chiefly, but he soon finds that he must also be an educator. The very fact that laymen serve in such work indicates enthusiasm, since all are volunteers. And enthusiasts may be all too ready to urge lines of work that promise much but lead to no definite gain. He must keep up with his scientific magazines for these people who ask his guidance are great readers and the popular press is full of science and pseudoscience. But his people on the committee are teachable and willing to follow any suggestions that he makes.

They will sponsor health education through the schools and parent-teacher associations. They will provide and distribute educational literature. They will secure publicity for health projects by press, radio, and moving picture. They will solicit boards of education and county commissioners to provide nursing staff. They will vote for the measures endorsed by their adviser. And not infrequently they are able to provide funds for special projects when money is not available through governmental channels. Christmas Seal funds are jealously watched to safeguard their honest and careful expenditure, but there is little in the shape of red tape when it can be shown that available funds are to be spent in approved work for the prevention of tuberculosis. We believe that the physician in general practice who will represent his county society as adviser to their county tuberculosis and health association will find the reaction upon his own work to be one of development and broadened vision.

---

## MEDICAL ECONOMICS

---

### STUDY

We sometimes hear a doctor say, "I don't have time to read medical journals and textbooks"; and, when we hear a thing like that, we offer up a little prayer for the poor fellow, that the time may not shortly arrive when he will find himself with more time on his hands than is entirely consistent with earning a living.

We also, sometimes, hear a man making sorry-for-himself noises about how the "damn fool specialists" in the cities get more in one fee than he is able to earn in a whole year.

If you go out to buy any commodity, you expect to get your money's worth—you do not intend to take less, and you are foolish if you think you can get more. The only imaginable reason why people are willing to pay more money for a Packard than they would for a Ford is because the Packard is a better car.

Medical service is as much a commodity as coal or coffee, and there are many more different grades in that commodity than there are in the things we eat and wear. If you are offering the public a high-grade product you can ask, and *receive*, a higher price for it than they would be willing to pay for an inferior article.

You will notice that the word "product" was used in the last sentence, and it wasn't a slip of the pen, either. Medical service is as truly a product of labor as are threshing-machines or wheat. We all labored hard, for years, in order to obtain sufficient knowledge to secure a diploma and a license to practice. If we stopped there, the machine we worked so hard to build has been deteriorating rapidly ever since; and the crop we sowed with such diligence is fast becoming choked with weeds.

Who are the men who do the largest amount of professional reading? Is it the men who see five or six patients a day and feel lucky, if they collect a couple of thousand dollars in a year? If such a man spends all his leisure time in sincere study, instead of in playing golf, reading the comic supplements, and crying because he "never had a chance," he will not long remain in the \$2000 class.

A poor boy from Switzerland landed in this country, one day, and began shining shoes and selling papers for a living. He died a number of years ago, with an international reputation and an income of over \$100,000 a year. His name was Nicholas Senn.

---

Plan now to attend the 79th Annual Session of The Kansas Medical Society to be held in Wichita, May 9 to 12. The detailed program will appear in April issue of Journal.



No, the big readers and the hard students are the ones who are seeing thirty, forty or fifty patients a day and figuring their incomes in five or six figures. If they didn't keep up the study they couldn't keep up the income. "You can't fool all the people all the time."

Here is the answer. If a young physician will start his library with five standard textbooks and one good medical journal, and thoroughly digests the contents of these books and that journal, he will soon be in a position to buy as many more as he needs; and if a man in practice does not digest the contents of at least two or three textbooks and at least one good journal every year, he will soon be down to the bed rock of the class of practice which comes because he's the only doctor in town or his fees are the smallest.

Study hard. Study every day. Fill all the minutes you now waste (and that doesn't mean the time you spend in enjoyable and needed recreation) with earnest and thoughtful study, and you will soon find yourself able to render the class of service for which people will pay well; and opportunities will come hunting for you.—Clinical Medicine and Surgery, July, 1937.

## NEWS NOTES

### POSTGRADUATE COURSE

Dr. F. P. Helm, Secretary of the Kansas State Board of Health, has announced that a postgraduate course on syphilis and gonorrhea will be presented in each Councilor District during the next several months.

Speaker for the course will be Dr. Arthur D. Gray, Topeka, and general plan of the course is that a correlated discussion on topics pertaining to the above subjects will be presented at two day meetings in each of the Councilor Districts. The course is to be sponsored by the Kansas State Board of Health in cooperation with the Society Committee on Venereal Disease and will be financed by Social Security Act funds provided by the United States Public Health Service.

Dates and places of meetings will be bulletinized to the entire membership within the near future.

The course is of particular interest inasmuch as it represents the first postgraduate activity on this subject which the United States Public Health Service has approved. Indication has been given that if the course is successfully received by the medical profession, several similar projects on other subjects will be approved for Kansas.

### LEGISLATION

The special session of the legislature adjourned March 1.

Only matter of close medical interest therein is the following bill which was introduced by Senator E. F. Pihlbad, Lindsborg, and which exempts hospitals and certain

other organizations and institutions from payment of sales tax:

#### SENATE BILL NO. 90

An Act relating to the sales tax, and providing exemptions, amending section 6 of chapter 374 of the Session Laws of 1937, and repealing said original section.

Be it enacted by the Legislature of the State of Kansas:

Section 1. Section 6 of chapter 374 of the Session Laws of 1937 is hereby amended to read as follows: Sec. 6. The following shall be exempt from the tax imposed by this act: (a) All sales of motor-vehicle fuel and cigarettes, or other articles the sale or use of which is made subject to a sales or excise tax under the laws of this state; (b) all sales to the state of Kansas and political subdivisions thereof, except when engaged in business specifically taxable herein; (c) any sale which under the constitution and statutes of the United States or of this state which may not be the subject of taxation by this state; (d) all sales of tangible personal property or service used in or for the performance of a contract for public works; (e) all sales of property used exclusively for state, county, municipal, educational, religious, benevolent and charitable purposes, except when engaged in business specifically taxable herein.

Sec. 2. Section 6 of chapter 374 of the Session Laws of 1937 is hereby repealed.

Sec. 3. This act shall take effect and be in force from and after its publication in the official state paper.

The measure was passed by both the Senate and the House of Representatives and was signed by Governor Walter A. Huxman on March 1.

A suggestion is made that representatives of each county medical society discuss this new law with their local hospitals. Kansas hospitals will be able to save approximately twenty-five thousand dollars per year under this amendment.

### OSTEOPATHS

Mr. Will Vernon, Larned, and Mr. Frank McFarland, Topeka, attorneys for B. L. Gleason, osteopath of Larned, filed their brief on the case of State vs. Gleason in the Kansas Supreme Court on February 14. A brief on behalf of the State as plaintiff and an amicae curae brief by the Society will be filed on the date of hearing of the case, April 4, 1938.

Decision in the case will possibly be handed down during the early part of May.

### THE SEVENTY-NINTH ANNUAL SESSION

Plans for the state meeting in May are almost complete. The committees are hard at work to make this one of the most entertaining and instructive sessions in the seventy-nine year history of the annual meetings of The Kansas Medical Society.

The program is excellent. This committee has secured nationally known enthusiastic teachers for every hour of lectures during the four day meeting. The members are giving special attention to the schedule of talks so that every physician who attends will have the opportunity to hear the guest speaker he desires.

The popular noon round-table luncheons will be repeated. This committee has devised an excellent plan to avoid the confusion usually attendant to the handing-in of written questions.

Entertainment has not been neglected. The trap and skeet tournament, and the golf tournament will be well organized with the idea of providing a day of fun climaxed by the golf banquet or "smoker", which promises to be all that the name implies. The alumni dinners and the annual banquet will also be conducted in a somewhat different fashion than heretofore.

The increase in the size of the annual meetings necessitated more space than is available in the hotels in Wichita so the Rose Room of the Wichita Forum was selected as a desirable place. It is large enough to accommodate comfortably the scientific sessions and the scientific and commercial exhibits. It is located conveniently within four blocks of the three largest hotels in the city.

The annual meeting of The Kansas Medical Society has developed into one of the best state meetings in the country. The committee this year has retained the many features which in the past have produced such successful meetings. In addition numerous innovations will be introduced to make these four days pleasant and worthwhile for the physicians of Kansas and their wives. Every member of the Society should make plans now to attend the meeting.

### TUBERCULOSIS PROGRAM

Dr. C. H. Lerrigo, Secretary of The Kansas Tuberculosis and Health Association has announced that an educational program on control of tuberculosis will be conducted throughout the state April 18 to 22 inclusive. The program is to be sponsored by The Kansas Tuberculosis and Health Association in cooperation with the Kansas State Board of Health and the Society Committee on Control of Tuberculosis, and will consist of both lay and professional meetings. Expenses are to be defrayed by The Kansas Tuberculosis and Health Association.

The speakers will be Dr. Paul A. Teschner, Chicago, Illinois, Assistant Director of the Bureau of Health and Public Instruction of the American Medical Association, and Dr. H. I. Spector, St. Louis, Missouri. Dr. Teschner will address the profession on "Cases, Contacts and Co-operation". For lay audiences his subject will be "Fighting Tuberculosis to a Finish". Dr. Spector will be the clinical speaker and will discuss subjects pertaining chiefly to the early diagnosis of pulmonary tuberculosis.

Tentative dates and places of the meetings are as follows: Leavenworth, April 18; Ottawa, April 19; Parsons, April 20; Wichita, April 21; and Russell, April 22. Detailed information concerning both the lay and professional meetings will be bulletinized within the near future.

### INDIGENT SURVEY

The Medical Committee of the Kansas State Board of Social Welfare has recently completed the first phase of its studies pertaining to indigent medical care in Kansas. This study consists of a questionnaire forwarded to the various counties wherein information concerning present methods of indigent medical service was obtained.

The next portion of the studies will include amplification of this information with a view toward ultimate recommendation of improved methods and plans in the various counties.

The study is being conducted in close cooperation with the Committee on Medical Economics of the Society.

### MEDICAL MOVIES

The central office has assembled a file listing information concerning the subjects and rental arrangements of available medical movies. Sample listings therein are as follows: Owner: American Social Hygiene Association, Division of Public Information, 370 Seventh Avenue, New York. "Modern Diagnosis and Treatment of Syphilis" (3 reels). Intended for the general practitioner, student, nurses and health officers. "Gonorrhea in the Male" (3 reels). Diagnostic and treatment technique, to be used preferably by well qualified lecturer. Rental at \$1.00 per reel, per day. Owner: Eastman Kodak Company, Teaching Films Division, Rochester, New York. These films have been approved by the American College of Surgeons. "Diagnosis and Treatment of Infections of the Hand", (3 reels). Rental \$9.00. "Intestinal Peristalsis" (1 reel). Rental \$3.00. "Technique of Blood Transfusions" (2 reels). Rental \$6.00. Owner: American Society for the Control of Cancer. "Canti Cancer Film" (1 and 2 reel versions). By Dr. R. G. Canti, London, England. Free, for use of the profession. Exhibitor to pay carrying charges.

The majority of films of this type are available to county medical societies upon payment of transportation charges or a moderate rental fee. Sizes are mostly 16 m.m. Both sound and silent films may be secured and the subjects cover practically every field of medical interest. Any county medical society interested in showing scientific or lay movies is invited to write for this information.

### TOURS

An enjoyable trip is promised to all physicians and their families who join one of the special tours to the San Francisco American Medical Association meeting in June. These tours have been arranged by the American Express Travel Service and are endorsed by twenty-five state medical societies. Itineraries will include the Indian Detour in New Mexico; the Grand Canyon of Arizona; Los Angeles; Santa Catalina Island; the Columbian River Highway in Oregon; Seattle, Washington; Victoria, Vancouver; Lake Louise and Banff in the Canadian Rockies; Yellowstone National Park; and Colorado Springs.

Rates for the tours are all inclusive and are open only to physicians and their families. A descriptive folder may be obtained through the central office or the transportation agents, The American Express Travel Service, 907 Walnut Street, Kansas City, Missouri.

### DR. EARLE G. BROWN

Dr. Earle G. Brown, former Secretary of the Kansas State Board of Health, has accepted the position of Health Commissioner of Nassau County, New York. He will assume his new duties on March 15. The appointment is for six years.

### NORTHWEST CONFERENCE

Mr. John F. Austin, Wichita, Executive Secretary of the Sedgwick County Medical Society was a speaker on the program of the Northwest Regional Conference held in Chicago, on February 13. Mr. Austin's paper was entitled "The County Society". The general subject of the meeting was "Medical Care for All the People". Representatives



from sixteen state medical societies took part in the discussion.

Dr. J. F. Gsell, President of the Society, also attended the meeting.

### K. U. ENDOWMENT ASSOCIATION

Two interesting pamphlets, "A Serious Danger" and "My Will, How and Why I Made It", have been received recently in the central office from the Kansas University Endowment Association.

This Association was chartered by the State in 1893, as an organization to receive and administer gifts in aid of the University, and at the present time is working in cooperation with the Committee on Endowment of the Society to promote research in medical science.

Any member who desires to receive copies of these pamphlets may do so by writing to the central office or to Dean Olin Templin, Executive Secretary of the Kansas University Endowment Association, Lawrence.

### CANCER MEETING

Dr. C. C. Little, Bar Harbor, Maine, Managing Director of the American Society for the Control of Cancer, was guest speaker at a lay meeting and a professional meeting on cancer held in Topeka on March 9.

The lay meeting was sponsored by the Kansas Women's Field Army in cooperation with The Kansas Medical Society Committee on Control of Cancer and the Shawnee County Medical Society Committee on Cancer. The professional meeting was sponsored by the Shawnee County Medical Society.

### HALL OF HEALTH

The committee of the Sedgwick County Medical Society has been astounded by the enthusiasm of the various exhibitors and the lay public in the Hall of Health, which will be held in Wichita from May 7 to 16. Every organization which has been approached is hard at work to produce an exhibit both educational and interesting. There is an intense interest among the public in things medical, so this show should draw thousands through its doors.

It is surprising to find the interest of the man on the street in the equipment and procedures of everyday medical practice. The laboratory, the operating room, the stethoscope, the incubator and many other instruments used daily by the physician are machines of wonder to even well informed lay people. The purpose of the exhibit is to bring before the people in a well organized fashion the more interesting of these tools in medicine.

Anatomy will be demonstrated by means of the Camp Transparent Woman, obstetrics by an exhibit on proper pre-natal care and also by the demonstration of the incubator in which the Dionne quintuplets were kept. There will be booths telling about syphilis, cancer, and tuberculosis, about the growth and care of teeth, about drugs and drug therapy, about the proper care of the eyes. The human heart will be heard through the amplifying stethoscope. The purpose and workings of an "iron lung" will be demonstrated with the machine. These exhibits and many others are in preparation.

This will be a truly remarkable exhibition and every physician in Kansas should see that his patients are informed that it is sponsored by the Society with the idea of bringing health knowledge to the people of Kansas.

### BOARD OF MEDICAL REGISTRATION

Dr. O. S. Rich, Dr. J. F. Hassig, Dr. F. S. Hawes, Dr. J. E. Henshall and Dr. J. A. Wheeler, members of the Kansas Board of Medical Examination and Registration attended the meeting of the Congress on Medical Education and Licensure held in Chicago in February.

The Board also held a special business meeting in Topeka on February 22. It was decided that the next examination will be held in the new Wyandotte High School in Kansas City on June 7 and 8.

### COMMITTEES

The following committee meetings have been held during the past month:

A meeting of the Committee on Conservation of Eyesight was held in Lawrence at 2:00 p.m. on January 9, 1938. Members present were Dr. Lyle Powell, Chairman; Dr. C. J. Mullen; Dr. H. L. Kirkpatrick, Topeka; Dr. Wm. Scales, Hutchinson; and Dr. Geo. Gsell, Wichita. Dr. H. L. Chambers, Secretary; Mr. Lawrence Lewis, Director of the Division for the Blind of the Kansas State Board of Social Welfare; Mr. Leroy Eubanks, Assistant Director of the Division of the Blind of the Kansas State Board of Social Welfare; and Clarence Munns, Executive Secretary, were also present.

The minutes of the last meeting were read and approved.

A bulletin issued by the chairman of the committee to all of the county medical societies on November 29 was read and approved. Upon motion made by Dr. Kirkpatrick, seconded by Dr. Scales and carried, it was ordered that the activities of each meeting of this committee shall be reported to the general membership.

Dr. Powell presented the report concerning the Kansas Silver Nitrate Law and the relative number of deliveries in the state by doctors of medicine, cultists and midwives. Upon motion by Dr. Kirkpatrick, seconded by Dr. Gsell and carried, it was agreed that this committee should recommend to the Executive Committee that the present method of prophylaxis in the Kansas Silver Nitrate Law should be approved and continued but that the nullifying clauses in this law should be removed.

Assent was given that the committee shall supervise the handling of a regular section on Eye, Ear, Nose and Throat in the Journal.

Upon motion by Dr. Gsell, seconded by Dr. Scales and carried, it was agreed that the invitation of the Kansas Board of Administration to visit and inspect the Kansas State School for the Blind should be accepted and that Dr. Powell and Dr. Kirkpatrick should be appointed as a committee for this purpose. Suggestion was made to the Executive Secretary that he obtain copies of all available reports pertaining to medical facilities of the Kansas School for the Blind.

Dr. Mullen presented a report concerning the examination and treatment programs contemplated under the medical blind assistance portions of the Kansas Social Welfare Act. Upon motion by Dr. Kirkpatrick, seconded by Dr. Scales and carried, it was agreed that the committee should approve the plans outlined by Dr. Mullen.

Dr. Powell presented a series of articles which had been prepared by himself on behalf of the committee for use by the Division of the Blind of the Kansas State Board of Social Welfare in a lay educational campaign which it is contemplating. All of these articles were approved by the committee for release.

1918 All Shell  
1930 Ful Vue  
1938 WILS-EDGE

**WILS-EDGE IS DEFINITELY HERE**

We are now in a position to give one day service  
**QUINTON-DUFFENS OPTICAL COMPANY**  
*Your Local Independent Wholesaler*

**TOPEKA**

**HUTCHINSON**

**SALINA**

# THE Lattimore Laboratories

**TOPEKA, KANSAS**

**J. L. Lattimore, M. D. Director**

**A. C. Keith, B. S. Chemist**

**Allen Gold, M.A., M.T.**

**H. C. Ebendorf, M. T.**

**We invite consultation about the case that needs pathological service.**

**Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00**

*Containers furnished upon request.*

## **OFFICES:**

**Topeka, Kansas**

**El Dorado, Kansas**

**Sedalia, Mo.**

**McAlester, Okla.**



## **NEUROLOGICAL HOSPITAL**

**Twenty-Seventh and The Paseo  
Kansas City, Missouri**

Modern Hospitalization of  
Nervous and Mental Ill-  
nesses, Alcoholism and  
Drug Addiction.

## **THE ROBINSON CLINIC**

**G. WILSE ROBINSON, M.D.**

**G. WILSE ROBINSON, JR., M.D.**



Mr. Lewis outlined several possible plans for furtherance of sight saving classes in the state and Dr. Kirkpatrick was asked to confer with Mr. Lewis in an effort to provide him with the assistance of this committee.

Adjournment followed.

\* \* \* \*

A meeting of the Committee on Endowment was held in Lawrence on January 25.

Members present were: Dr. H. L. Chambers, chairman, Lawrence; Dr. F. C. Boggs, Topeka, and Dr. Pettit, Paola. Dean Olin Templin, Executive Secretary of the K. U. Endowment Association was also in attendance.

There was a general statement by the chairman, explaining that Dean Templin's organization has funds that could be spent on medical research or medical education, and that he and his group are friendly to any promising suggestions or workable ideas that the profession might bring forward.

Dean Templin then explained that his Association was designed and developed to allow the University to do certain desirable things and to do them in ways not permitted by the set-up already established in the State Constitution. Some of this has to do with the acquiring and holding of real estate, but applies more to the fact that by it or through it, gifts, bequests and the like, may be directed for more or less specific applications. If these are medical ones, it is and will continue to be so ordered.

Dean Templin offered to the Society and through the Society to the profession, every facility his Association can furnish to further the accomplishments of the aims upon which the two organizations may mutually agree. This includes use of mailing lists, printing, mailing, etc.

The Committee, in turn, pledged cooperation in finding and developing his Association's contacts, and in the development and application of its program as it is put in operation.

It was agreed that it will be wise and desirable to connect such special matters as tuberculosis campaigns, cancer educational efforts, venereal disease study, and the like, as they become more or less endowed movements, with the Endowment Association. This connection is recommended only for financial safety and financial perpetuity, it being understood that the professional and clinical phases of these matters are always to remain in The Kansas Medical Society.

It was agreed that the Association will mail copies of its brochure on wills to the members of this Committee.

Adjournment followed.

\* \* \* \*

A meeting of the Committee on Scientific Work was held in Topeka on January 28, 1938. Those present were: Dr. H. L. Chambers, Lawrence, Chairman; Dr. G. A. Finney, Topeka; and Dr. H. S. O'Donnell, Ellsworth. Clarence G. Munns was present as Executive Secretary.

Dr. Chambers reviewed the work performed by the committee during the past year. He described in particular the speaker's bureau and program suggestions forwarded to each county medical society in September, 1937.

Discussion followed concerning the importance and need of each county medical society holding regular and frequent scientific meetings. It was decided that the committee should issue a bulletin recommendation of this kind to the county medical societies.

Decision was made that the committee should issue a bulletin to the county medical societies suggesting that by reason of present morbidity and mortality rates, each society should devote considerable work during the next

year on scientific programs pertaining to cancer, heart disease, venereal disease and preventive medicine.

Approval was given for a bulletin to be issued urging that every member attend at least two intersectional post-graduate meetings each year. The committee felt that the following meetings could be recommended for this purpose: Annual sessions of the American Medical Association, The Kansas Medical Society, the Kansas City Southwest Clinical Society, the Oklahoma City Clinical Society, the Omaha Clinical Society, the Rocky Mountain Medical Conference, the Interstate Postgraduate Medical Association, and the St. Joseph Clinical Society.

The committee pledged its assistance to various other committees of the Society and to the membership as a whole toward the following scientific advantages: Complete physical examination for early recognition of cancer; extensive use of dark field diagnosis for syphilis; extensive use of Wassermann's and particularly as a routine precaution in prenatal care; and extension in all ways possible of immunization and preventive medicine projects conducted by county medical societies.

A recommendation was made that each councilor district should hold periodic scientific meetings.

A resolution was adopted wherein the committee should suggest to Dr. N. E. Melencamp, President of the Society for 1938-39, the possibility of appointment of a committee on control of heart disease, to study and correlate the scientific work of the Society on this important present cause of death.

Adjournment followed.

## BULLETINS

The following bulletins were issued by the Committee on Control of Tuberculosis under date of February 11:

TO: All Secretaries—County Medical Societies—Official Representatives—All Other Counties.

Subject: Pneumo-thorax Therapy and Pneumo-thorax Equipment

This committee desires to announce that arrangements have been made with the Board of Administration wherein physicians may secure instruction in pneumo-thorax therapy at the State Sanatorium for Tuberculosis at Norton.

The plan approved by the Board is as follows: Any physician interested in learning pneumo-thorax treatment or in furthering his present technique should write to Dr. C. F. Taylor, Superintendent of the Sanatorium, whereupon a date will be arranged for the physician to visit the Sanatorium. During this visit the physician will be given without cost all instruction and assistance he desires.

Dr. Taylor has recently developed an inexpensive pneumo-thorax machine which can be easily constructed by any physician with local mechanical assistance. This machine coupled with the above instruction should make it possible for any Kansas physician to give pneumo-thorax treatment. Dr. Taylor will be glad to furnish construction details of this machine upon request.

It is the belief of this committee that Kansas should increase its facilities for pneumo-thorax therapy, and that through this means many non-infectious patients can be treated by their family physicians rather than at state expense. It is hoped, therefore, that one or several physicians in each county will take advantage of this offer.

Committee on Control of Tuberculosis,

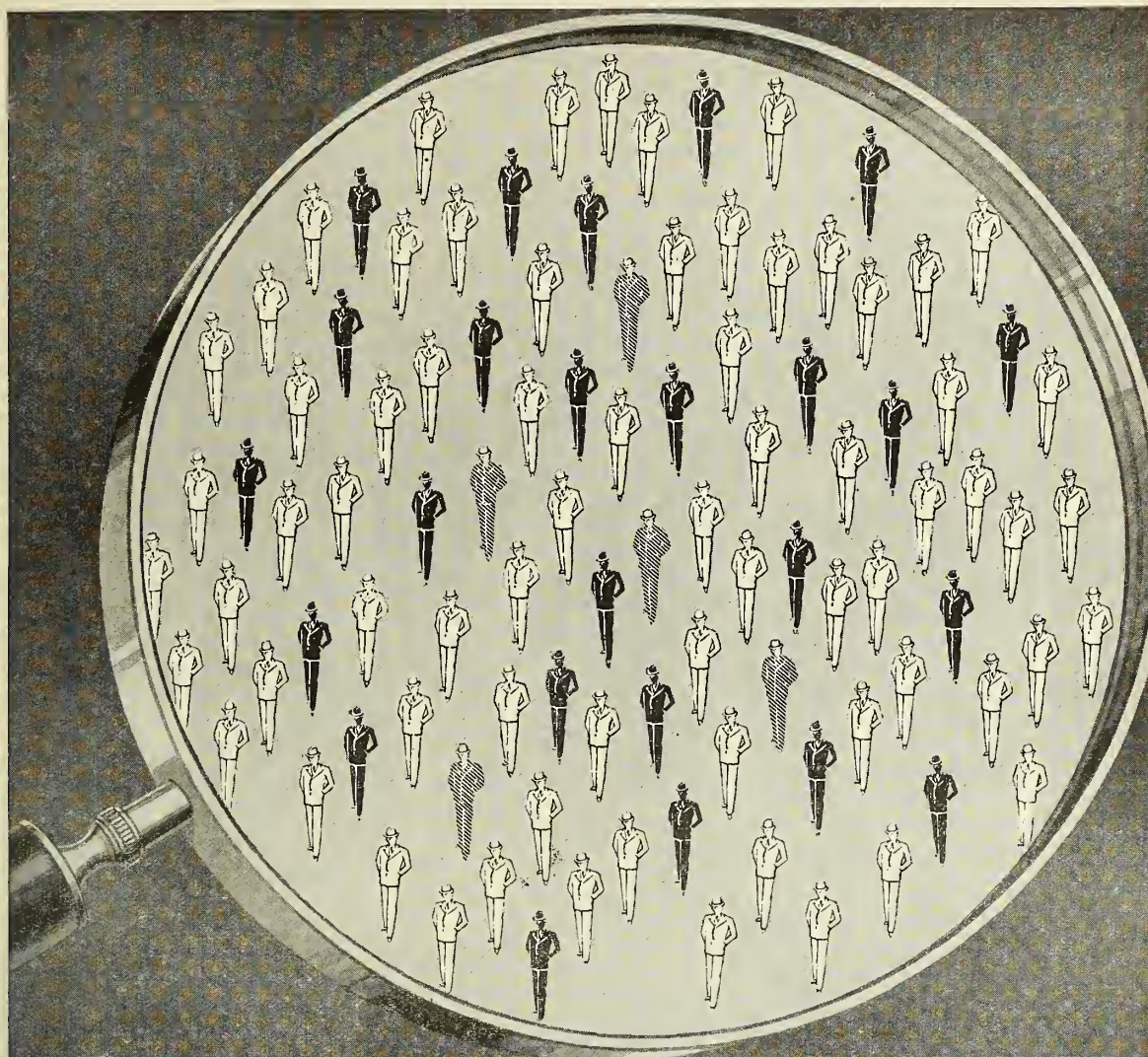
Henry N. Tihen, M.D., Chairman.

\* \* \*

TO: All Secretaries—County Medical Societies—Official Representatives—All Other Counties.

We believe you will be interested in the following recommendations which were adopted by the Committee





## *Those 25 Patients who can be saved*

Of one hundred cases developing type I pneumonia, seventy will recover and five will die regardless of treatment. The remaining twenty-five will die without treatment, but can be saved by prompt administration of Antipneumococcic Serum, Felton.

Reports in recent medical literature have shown that the very early use of spec-

ific antipneumococcic serum is important. In a series of 160 type I pneumonia cases (R. L. Cecil J. A. M. A. 108:689, 1937) in which specific antiserum was given within twenty-four hours of onset, mortality was reduced to one-third the usual rate in serum-treated cases, and to one-sixth the average rate in cases not receiving serum.

Antipneumococcic Serum (Felton) Type I, Refined and Concentrated, is available in syringe packages containing 10,000 and 20,000 units; Antipneumococcic Serum (Felton) Types I and II, Refined and Concentrated, in syringe packages containing, respectively, 10,000 and 20,000 units of each type.

**PARKE, DAVIS & COMPANY • Detroit, Mich.**  
 THE WORLD'S LARGEST MAKERS OF PHARMACEUTICAL AND BIOLOGICAL PRODUCTS



on Control of Tuberculosis at its last meeting on January 9.

As you will note, one of these pertains to tuberculosis clinics and the other to a uniform procedure for tuberculin testing. It is the hope of the committee that these recommendations various counties and in making procedures uniform among the various state agencies conducting tuberculosis programs.

It is hoped that each county medical society will appoint a Tuberculosis Committee to take the leadership in tuberculosis work in its own county, working in cooperation with the other tuberculosis agencies in the state—namely the Tuberculosis Department of the State Board of Health, the Kansas Tuberculosis and Health Association, and the Norton Sanatorium. Several county medical societies have programs of tuberculosis work in their own counties and these plans will be published in the tuberculosis section of *The Journal* from time to time.

#### "Resolution on Tuberculosis Clinics:

1. The Committee finds that there are several types of Tuberculosis Clinics in operation in various parts of the state, consisting of Tuberculin Testing Clinics held by the State Board of Health, Diagnostic Clinics held by the Kansas Tuberculosis and Health Association and Diagnostic and Treatment Clinics conducted by the county medical societies and a Diagnostic and Treatment Clinic at the Norton Sanatorium.

2. The Committee further finds that some of these clinics are considered to be of definite value by the local medical profession; the Committee also finds that some of the clinics have been so conducted as to be probably of very little value and have aroused considerable opposition on the part of the local medical profession.

3. The Committee therefore neither opposes or urges the development of Tuberculosis Clinics throughout the state but believes that this is a matter to be determined for its own county by each local county medical society after consultation with the representatives of the local and state Tuberculosis Associations and the County and State Health Department.

4. The Committee approves the holding of any Tuberculin Testing, Diagnostic, or Treatment Tuberculosis Clinic which is approved by the local county medical society.

5. The Committee opposes the holding of any Tuberculin Testing, Diagnostic, or Treatment Tuberculosis Clinic which is disapproved by the local county medical society.

6. This Committee would urge the observance of the following details in any Tuberculosis Clinic now established or in any proposed Tuberculosis Clinic:

- (a) That it be approved by the local county medical society.
- (b) That in addition to being approved by the local county medical society, it would be desirable for it to be supervised by a committee of the local county medical society working with any other organization interested in the clinic.
- (c) That the clinic be held at regular intervals.
- (d) That the clinician or clinicians working in the clinic be chosen by the local county medical society.
- (e) That the question of fees, admittance of patients, and all similar details be approved by the local county medical society.

7. Local publicity for any clinic work should be endorsed equally by the local medical society and by any other groups assisting in the clinic work.

8. This Committee believes that the leadership in the Tuberculosis problem, as well as in all other medical problems, belongs primarily in the hands of the medical profession and their organized societies, but that the Medical Society should extend proper cooperation to other

recognized agencies in this field, and in turn will expect proper cooperation from these other agencies.

9. This Committee further agrees to act as a liaison agent to promote better cooperation between the county medical societies, the Tuberculosis Department of the State Board of Health, the Kansas Tuberculosis and Health Association, and the Norton Sanatorium."

#### "Resolution on Tuberculin Testing:

In the control of tuberculosis, early and accurate diagnosis of the case, determination of contacts, and prevention of further spread from a determined source of infection are basic. This involves the use of general procedures such as reporting of the case, epidemiological investigation of source and contacts, and regulation of the patient in such a manner as to prevent infection of others. In addition, however, certain special procedures are required because of characteristics peculiar to this disease.

Symptoms are absent in the early stage of the disease. The patient does not present himself until after the most favorable time for recovery has passed. Late symptoms are frequently neither characteristic nor dramatic so far as the general public is concerned. The mode of spread is obscure and not impressive to the average person. For these reasons he does not present himself to the physician until definite symptoms are present and many others have been exposed.

To be effective a control program must briefly: (1) isolate the infectious cases, and (2) find the minimal cases. This involves the provision of many services and the cooperation of many organizations. The most important function of the health department in this connection is the case finding program which, through education, demonstrations, epidemiology, and other procedures, will put people into the hands of the physicians for diagnosis and continued care.

The most effective case finding procedure is the tuberculin test with follow-up chest x-ray. This test has made possible the practical eradication of bovine tuberculosis, where it has been thoroughly applied. In the human, it is recognized as a test having no superior in the diagnosis of any disease.

The Kansas State Board of Health, with the cooperation of The Kansas Medical Society, and the Kansas Tuberculosis and Health Association, is encouraging the more extensive use of this procedure, both in the physicians office and in groups.

The tuberculin test is used, according to circumstances, under the following conditions:

- (1) In localities of known high morbidity.
- (2) Household contacts of known cases.
- (3) Persons in the physician's practice whom they suspect of being tuberculous.
- (4) In schools, industrial groups, etc., as an educational project.
- (5) In epidemiological investigations.

The tuberculin testing program is arranged by a representative of the State Board of Health, who is in charge of tuberculosis control, with the assistance of a public health nurse. Contact is made officially with the county medical society in group meetings, and with individual physicians to discuss the tuberculosis situation and the technical and administrative points of the program. Inasmuch as it is the practicing physician who sees the first departure from normal health, it is he who must diagnose the early case of tuberculosis. The program has as its entire purpose, education and the creation of the interest necessary to bring the people to their physician for care. The tuberculin test is valuable because it gives the individual something tangible to consider.



**KANSAS FLORENCE CRITTENTON MISSION**

ESTABLISHED 1900

**Maternity Home For Young Unmarried Mothers**  
Seclusion—Sympathetic Care—Terms Reasonable

For Information Address, Mrs. A. H. Byers

504 Horne St., Topeka, Kansas

Phone 2-0770

**WOODCROFT HOSPITAL****PUEBLO, COLORADO**

Founded 1896 by Dr. Hubert Work

A modern, newly constructed  
sanitarium for the scientific  
care and treatment of those  
nervously and mentally ill, the  
senile and drug addicts.**CRUM EPLER, M.D.**

Superintendent

**THE TROWBRIDGE TRAINING SCHOOL**

Established 1917

**A HOME SCHOOL for NERVOUS and BACKWARD CHILDREN****The Best in the West**

Beautiful Buildings and Spacious Grounds. Equipment Unexcelled. Experienced Teachers. Personal Supervision given each Pupil. Resident Physician. Enrollment Limited. Endorsed by Physicians and Educators. Pamphlet upon Request.

1850 Bryant Building

**E. HAYDEN TROWBRIDGE, M.D.**

Kansas City, Mo.

**GUARDIANS****AGAINST "CROWS FEET"****AND EYE FATIGUE****CRUXITE LENSES***Cruxite Lenses are Patented*You can count on Cruxite Lenses to guard  
your patients' eyes from the wrinkles  
and fatigue caused by uncontrolled light.  
Because Cruxite Lenses screen out the  
ultra violet light rays and scientificallycontrol the amount of useful light that  
reaches the eyes — providing a uniform  
reduction of visible light. Cruxite Lenses  
are available in four shades. Tillyer  
Lenses are also supplied in Cruxite.**AMERICAN OPTICAL COMPANY**



The program is conducted officially by the State Board of Health, the county medical society, and the Kansas Tuberculosis and Health Association. Publicity is prepared, interested lay groups contacted and informed as to the purpose of the program. The significance of the tuberculin test is thoroughly explained. In case of children, a request card is signed by the parent. This card gives the name of the family physician. After the tests are done, a letter of explanation is sent to the parents, advising them to consult their physician for x-ray examination or such service as is indicated. A list of positive reactors is sent to each physician named on the card. In the case of indigents requiring x-ray, every effort is made to provide funds. Such follow-up work as is possible is done by the public health nurse.

This method of case finding is considered essential in any tuberculosis control program. It requires the co-operation of all persons concerned in the program and an understanding of its possibilities and limitations.

#### Administrative Procedures:

1. Official sponsorship by county medical society.
2. Conference with individual physicians including distribution of literature, technique of tuberculin test, etc.
3. Contact with other interested groups, schools, clubs, etc.
4. Newspaper publicity.
5. Explanation to parents—request cards.
6. Tuberculin testing.
7. Letter to parents explaining result and referring patient to family physician.
8. Follow-up by public health nurse."

The Committee is also happy to announce that the Kansas State Board of Health has secured finances from the United States Public Health Service wherein post-graduate programs on tuberculosis may be held in the various Councilor Districts and that the Kansas Tuberculosis and Health Association has appropriated \$600.00 wherein a series of lay educational programs on the same subject may be conducted. Both of the programs will be sponsored jointly by the Kansas Tuberculosis and Health Association, the Kansas State Board of Health, The Kansas Medical Society and the county medical societies of the places of meeting.

Committee on Control of Tuberculosis,  
Henry N. Tihen, M.D., Chairman.

### COUNTY SOCIETIES

The following officers were elected at a meeting of the Anderson County Medical Society held in Garnett on January 25: Dr. O. N. Clark, Greeley, president; Dr. H. F. Spencer, Garnett, vice-president; Dr. Ralph E. White, Garnett, secretary; Dr. R. D. Fraker, Garnett, delegate; and Dr. Fred Henning, Westphalia, board of censors. Dr. J. A. Milligan, Garnett, retired as secretary after having served in that capacity for eighteen years. Another meeting of this society was held in Garnett on February 16.

Dr. V. H. Bergmann and Dr. Frank Postlethwaite, both of Kansas City, Missouri, were speakers at a meeting of the Bourbon County Medical Society held in Fort Scott on February 14. Dr. Bergmann's subject was "Common Dysfunction of the Ovary in Endocrinology", and Dr. Postlethwaite spoke on "Ambulatory Treatment of Diseases of the Rectum".

The Cowley County Medical Society met in Winfield on January 27, for discussion of the problem of indigent medical care in that county. A committee of five was ap-

pointed to formulate a program on this subject for presentation to the county commissioners. Dr. J. F. Gsell, Wichita, was a guest at the meeting.

A meeting of the Douglas County Medical Society was held in Lawrence on February 1, with Dr. George W. Davis, Ottawa, as speaker. Dr. Davis discussed "Cannabinonia, the Menace to American Youth". Another meeting of this society was held in Lawrence on March 1. The program consisted of a symposium on "Osteogenic Sarcoma", as follows: "Case Report", Dr. E. P. Sisson, Lawrence; "Case Report and Report of Incidence in 27 Large Schools in Past 5 Years", Dr. R. I. Canuteson, Lawrence; "Discussion from Standpoint of the Orthopedic Surgeon", Dr. C. B. Francisco, Kansas City; "Discussion from Standpoint of the Pathologist", Dr. H. R. Wahl, Kansas City; and "Discussion from Standpoint of the Roentgenologist", Dr. Galen M. Tice, Kansas City. An inspection of the new nurses' home, recently presented to the University of Kansas by Mrs. J. B. Watkins, followed the program.

The following officers of Elk County Medical Society were reelected for the coming year at a meeting held in Elk Falls on December 31. Dr. R. C. Harner, Howard, president; Dr. F. K. Day, Longton, vice-president; Dr. F. L. DePew, Howard, secretary-treasurer; and Dr. F. L. DePew, delegate. Dr. R. C. Hutchinson, Elk Falls, was also elected to honorary membership.

A dinner meeting of the Franklin County Medical Society was held in Ottawa on February 23, with the following program: "The Venereal Disease Problem", Dr. A. D. Gray; "New Ideas in Treatment of Fractures", Dr. Lerton V. Dawson, Ottawa; and a motion picture on "Anemias". Guests at the meeting included several lawyers, druggists and dentists from Franklin County and a number of physicians from surrounding counties.

A meeting of the Franklin County Medical Society will be held in Ottawa on March 30. Wives of members will be dinner guests of the organization and the program will be "Lights and Shadows", memories of a half century experiences of a county doctor, by Dr. O. L. Garlinghouse, of Iola, and "Medical Reminiscences of a Lawyer", by Judge Hugh Means. Invitation has also been extended to include members and families of the druggists, dentists and bar associations of Franklin county.

Members of the Harvey County Medical Society met in Newton on February 7. The program was as follows: "Case Report", Dr. W. F. Schroeder, Newton; "The Horseshoe Kidney", Dr. V. L. Pauley, Wichita; "Thyrotoxicosis", Dr. Andrew Rueb, Halstead; and "Types of Deafness", Dr. E. E. Peterson, Halstead.

The Labette County Medical Society met in Parsons on February 23. Speakers and their subjects were: Dr. Winifred L. Post, "Foreign Bodies in the Air Passage and Therapy of the Lung through the Bronchoscope"; and Dr. H. D. McGaughey, "X-Ray Radiation in Non-malignant Conditions".

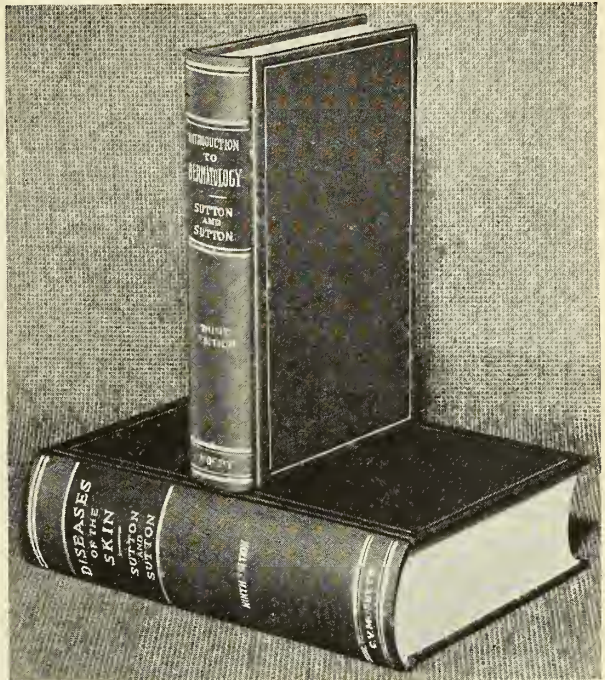
Dinner meetings of the Marion County Medical Society were held in Marion on February 2, and March 2. At the February meeting Dr. W. M. Tate, Peabody, discussed "Insulin Shock Therapy" and Dr. R. R. Nykamp, also of Peabody, spoke on "Tuberculosis Control". Dr. J. L. Lattimore, Topeka, spoke on "Interpretation of Laboratory Reports" at the March meeting.

---

## Dependable Help for Diagnosing and Treating Skin Diseases

---

By **R. L. SUTTON**, Professor of Dermatology, University of Kansas, School of Medicine, and **R. L. SUTTON, JR.**, Instructor in Dermatology, University of Kansas, School of Medicine.



### The COMPLETE Reference DISEASES of the SKIN

If you want a complete reference book—a textbook and an atlas combined—"Diseases of the Skin," with its 1433 pages and 1310 illustrations, will be the solution to your needs. Since 1917 this book has been a leader. The present NINTH EDITION is better than ever. It will help you to correctly diagnose your case—and tell you how to treat it. The symptomatology, diagnosis, and treatment of the various disorders of the skin are presented clearly and simply. Particular emphasis has been placed on pathology and treatment. The majority of the therapeutic measures recommended are those which the author has found useful and practicable in his own private and dispensary practice.

**DISEASES OF THE SKIN**—9th Edition.  
1433 pages, 1310 illustrations. Price, \$12.50.

### The HANDY Reference INTRODUCTION TO DERMATOLOGY

If you want a smaller book—less extensive, but equally as accurate, "Introduction to Dermatology" will satisfy. Completely rewritten and improved by the addition of 45 new illustrations. Much new information regarding therapy has been introduced into this new Third Edition. The section on syphilis has been enlarged.

This book, based on the larger text, combines judiciously the viewpoints of the senior author and the newer points of view of the junior author, retaining, however, the original latticework of fundamental facts which contributed so much to the value and popularity of the parent volume, and omitting much descriptive and statistical matter which is of interest to only the research worker and the specialist.

**INTRODUCTION TO DERMATOLOGY**  
—3rd Edition. 666 pages, 229 illustrations.  
Price, \$5.00.

---

#### THE C. V. MOSBY, COMPANY

3525 Pine Blvd., St. Louis, Mo.

Gentlemen: Send me the Sutton book checked with (X), charging my account.

- ☐ DISEASES OF THE SKIN—\$12.50  
☐ INTRODUCTION TO DERMATOLOGY—\$5.00

Dr. \_\_\_\_\_ Address \_\_\_\_\_

KMJ-3-38



Medical motion pictures were the program feature at a meeting of the Marshall County Medical Society held in Marysville on February 24.

The Meade-Seward County Medical Society met in Liberal on February 4, with the Seward County commissioners as guests. Mr. John C. King, Social Welfare Director of the county discussed the medical indigent problem. A motion picture on "Appendicitis" was shown.

The Miami County Medical Society has recently signed a contract with the county commissioners for provision of indigent medical care in that county.

Dr. Ben Brunner, Wamego, and Dr. F. P. Riley, St. Marys, were elected president and secretary respectively of the Pottawatomie County Medical Society at a meeting in Wamego on January 27.

A meeting of the Sedgwick County Medical Society was held in Wichita on March 1, with Dr. H. E. Marshall and Dr. W. A. Phares both of Wichita, as speakers. Their subjects were "Sinusitis—A Practical Viewpoint", and "Etiology of Gastric and Peptic Ulcers", respectively. Another meeting will be held on March 15 with the following program: "Diagnostic Hints from Blood Pictures with Report of Three Cases", Dr. E. L. Mills, Wichita, and "Metastases of Carcinoma of the Breast", Dr. W. C. Bartlett, Wichita.

Dr. F. J. McEwen and Dr. J. S. Hibbard, both of Wichita, were speakers at a meeting of the Pratt County Medical Society held in Pratt on February 25. "Heart Disease" was the subject of Dr. McEwen's paper, and Dr. Hibbard presented "Surgical Treatment of High Blood Pressure".

A meeting of the Ford County Medical Society was held in Dodge City on February 11. Dr. A. E. Pickens, Wichita, spoke on "Management of Prostatic Obstruction".

A combined meeting of the Shawnee County Medical Society and the Shawnee County Dental Society was held in Topeka on March 7. The program was as follows: "Interrelation of Preventative Medicine and Preventative Dentistry", Dr. Louis Fleisch (D.D.S.), Topeka, discussion opened by Dr. Don C. Wakeman; "Relationship Between Focal Infection and General Medicine", Dr. J. G. Stewart, Topeka, discussion opened by Dr. C. N. Mertz (D.D.S.), Topeka; "Oral Infections in Relation to Systemic Infection", Dr. Mertz, discussion opened by Dr. Stewart; "Relationship Between Sinus Disease and the Teeth", Dr. H. W. Powers, Topeka, discussion opened by Dr. Clinton Stalker (D.D.S.), Topeka.

A meeting of the Saline County Medical Society was held in Salina in February. Dr. O. D. Walker, Salina, and Dr. M. J. Brown, Salina, who have both practiced for over fifty years were elected to honorary membership. The program of the meeting included: "Treatment of Syphilis", by Dr. D. A. Anderson, Salina; and "The Clinical Use of Protamine Zinc Insulin", by Dr. Ernest E. Harvey, Salina.

The Washington County Medical Society held a dinner meeting on February 8 in Washington. A paper entitled "The Musings of a Family Doctor" was presented by Dr. F. H. Rhoades, Hanover.

The Wilson County Medical Society met for dinner in Neodesha on February 14. The Auxiliary members of the county and Dr. R. W. Urie, Dr. N. C. Morrow and Dr. T. D. Blasdel, of Parsons, were guests.

A meeting of the Wyandotte County Medical Society was held in Kansas City on March 1, with the following program: "Case of Polycystic Kidneys"—clinical presentation, Dr. L. L. Bresette, Kansas City—Pathological presentation, Dr. Hamilton, Kansas City; "Case of Acute and Chronic Nephritis with Cardiac Complications"—clinical presentation, Dr. R. T. Lucas, Kansas City—pathological presentation, Dr. W. W. Summerville, Kansas City; "Case of Gastro-Intestinal Manifestations"—clinical presentation, Dr. E. S. Miller, pathological presentation, Dr. Hubert Floersch. A dinner meeting of this society will be held on March 15. Wives of members will be guests and the program will be on "Medical Economics".

## MEMBERS

An article honoring Dr. Geo. M. Gray, Kansas City, Kansas, is featured in the February 19 issue of the Weekly Bulletin of the Jackson County Medical Society.

Dr. Thomas D. Fitzgerald, who has been practicing in Topeka for the past year, has been appointed as Assistant Physician of the Student Health Service of the University of Kansas at Lawrence.

Dr. E. C. Moser and Dr. Roy Moser are completing plans for construction of a hospital in Holton.

Harcourt, Brace and Company, Inc., announce publication of a new book by Dr. Karl A. Menninger, Topeka, entitled "Man Against Himself".

Dr. C. A. Hellwig and Dr. C. C. Tucker, both of Wichita, are to present a paper and exhibit on "Proctological Tumors", before the section of Gastro-Enterology at the San Francisco meeting of the American Medical Association in June.

Newly appointed county health officers include: Dr. E. R. Hill, Lyons, Rice County; Dr. August A. Meyer, Alma, Wabaunsee County; Dr. O. P. Wood, Marysville, Marshall County; Dr. Alfred J. Horejsi, Ellsworth, Ellsworth County; Dr. Benjamin Brunner, Wamego, Pottawatomie County; Dr. R. W. Moore, Eureka, Greenwood County; Dr. F. A. Trump, Ottawa, Franklin County; Dr. F. R. Croson, Clay Center, Clay County; Dr. B. L. Phillips, Paola, Miami County; Dr. L. W. Zimmerman, Liberal, Seward County; and Dr. Ivan B. Parker Hill City, Graham County. The following county health officers have been reappointed: Dr. S. B. Dykes, Esbon, Jewell County; Dr. Robert J. Lanning, Junction City, Geary County; and Dr. Donald A. Bitzer, Washington, Washington County.

An article on "Calcinosis Cutis", by Dr. M. E. Pusitz, Dr. A. K. Owen, and Dr. G. A. Finney, all of Topeka, was published in the January 29 issue of The Journal of the American Medical Association.

## ANNOUNCEMENTS

March 28 and 29 bring the doctors of the Southwest another banner program. On these dates the annual Spring Medico-Military Symposium will be presented by the Kansas City Southwest Clinical Society. Obesity, colitis, sulphanilamide, abdominal surgery, insulin, hematology and many other subjects will be discussed in the morning programs. The afternoons will be devoted to symposia on arthritis and genito-urinary diseases. Moving pictures of military subjects will be shown. Chemical

# BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

## I. CLEANSING OPERATIONS

● As reference to a recent text on canning will disclose (1) the details of commercial canning procedures will vary from product to product. There are, however, certain basic operations which are included in practically all canning procedures. In the belief that they may prove of interest, it is our intention to describe in broad detail the nature and purposes of these essential operations.

One of the first and most important steps in commercial canning is the thorough cleansing of the raw food material received at the cannery. The purpose of such an operation is, of course, immediately evident, namely, to remove soil, dirt or other inedible substances which may be present. However, cleaning also serves to reduce substantially the load of spoilage bacteria with which Nature usually endows raw foods.

Commercially, cleansing is effected in a variety of ways. In general, however, water washers specifically designed for the various types of products are used. In these machines, the raw food material is subjected to high-pressure sprays or strong flowing streams of potable water while passing along a moving belt or while being tumbled by agitating or revolving screens. Sometimes a "flotation" type of washer is also used to remove chaff or similar material. With cer-

tain products, water washing is preceded by a "dry" cleaning treatment in which adhering soil and dirt is mechanically removed from the food by revolving or agitating screens, or by strong air-blasts.

Also, in certain canning procedures, operations whose basic functions are not primarily to clean the raw material may also exert a cleansing effect. Thus, the "blanch" or scalding treatment accorded many products serves to clean the food, as does the water spray sometimes applied to foods after the blanch.

Modern canners know the necessity of thorough cleansing of the raw materials they use. They appreciate that thorough cleaning and removal of extraneous material decreases the load of spoilage organisms which must be destroyed by the heat processes to which all canned foods are subjected. They also appreciate the necessity of maintaining strict plant and equipment sanitation to destroy spoilage bacteria which may be carried in by raw foods.

Because of the efficient cleansing of raw materials and close attention to the other important operations in the commercial canning procedures, modern canned foods must be ranked among the most wholesome foods coming to the American table. (2)

## AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

(1) 1937 *Appertizing or The Art of Canning*, A. W. Bitting, The Trade Pressroom, San Francisco. (2) *Preventive Medicine and Hygiene*, M. J. Rosenau, Appleton-Century Co., New York.

*This is the thirty-third in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



warfare, maneuvers of the battle fleet and active treatment of the wounded on the battlefield will be shown with sound. Special guests will be Dr. J. Albert Key, professor of clinical orthopedic surgery, Washington University; Dr. Ovid O. Meyer, associate professor of medicine, University of Wisconsin; Lt. Comdr. Lincoln Humphreys, U.S.N., and Colonel Kent Nelson, U.S.A.

---

## AUXILIARY

---

### PRESIDENT'S MESSAGE

Dear Auxiliary Friends:

Space will not permit me to tell you in detail of my delightful trip last month.

On January tenth Mrs. Frank Coffey, your president elect; Mrs. F. L. Dennis, president of Ford County Auxiliary and myself were guests at a tea given in the home of Mrs. Edgerton by the members of the Sedgwick County Auxiliary. We were house guests of Dr. and Mrs. E. J. Nodurft. The twelfth found us, Mrs. Coffey, Mrs. Dennis and myself, in Pratt at a luncheon as guests of Pratt County Auxiliary.

From there we journeyed to Dodge City as house guests of Dr. and Mrs. F. L. Dennis. Mrs. Coffey and I were guests of Ford County Auxiliary at a dinner and meeting on the evening of the fourteenth.

Mrs. Dennis and I went to Hays with Mrs. Coffey as her house guests. While there we were honor guests of Central Kansas Auxiliary at a luncheon on the seventeenth.

I was impressed by the friendliness everywhere. It was a most delightful experience and I am deeply grateful for the hospitality shown me.

Mrs. R. W. Urie.

### LEGISLATION AND THE AUXILIARY

Mrs. E. C. Duncan  
Fredonia, Kansas

It is a pleasure to speak to you once more through the columns of The Journal of The Kansas Medical Society. As legislative chairman for the state auxiliary, I wish to bring to you a few suggestions regarding the work we may do in legislation.

As you well know, it is impossible to accomplish any project without a well informed mind concerning that project. Problems of legislation pertaining to the public and the doctor are coming up each year and it is our duty to inform ourselves regarding these problems.

One big reason that quackery is in existence today is because many of the lay people have not had an opportunity to become informed of the difference between medical science and quackery. We should not condemn the lay people who have been denied this information but rather seek to enlighten them concerning these facts.

The world has grown more and more health conscious as the years go by. The dictionary explains health as "A condition of physical soundness" and intelligent people everywhere are interested in this vital subject of man's well being. Self-preservation is a hereditary trait and for that reason makes all people interested in legislative matters pertaining to health.

Quack practitioners have not been slow to recognize the eagerness and the desire of the people to know more of how to keep well so they offer in various and sundry ways "cure-alls" regardless of the type of disease, each claiming that his own one product is good for restoring health to the person who takes it. We Americans as a whole, being prone to act and then think, fall easily into the snare set for us by these fake "cure-alls". It is the duty of each auxiliary member to inform herself as to the progress of medical science and the laws pertaining to this so that she may do her bit in making this world a more healthful place in which to live. This then in turn will tend to make the public see the need of legislation protecting our citizens from the clutches of the quacks.

Untrue statements are sometimes circulated regarding some bill which is to come before the legislature and we should make it our duty to be well informed upon such a bill and then work quietly and tactfully toward correcting this misinformation in the minds of those with whom we come in contact.

No undertaking in legislative matters of any auxiliary unit should be started without the advice and counsel of that unit's local medical society for much harm might be done by persons of best intentions because of inadequate knowledge.

Summing up our legislative work comes to this: Inform yourselves, work quietly and only upon the advice of your local medical society for any outstanding undertaking.

---

The officers of the auxiliary, both state and national, regard the exchange of ideas through the news items of the official medical journals as of considerable importance. We are happy to receive any news items, but those describing accomplishments, purposes or methods are particularly desirable, since such stories may be of assistance to other auxiliaries.

---

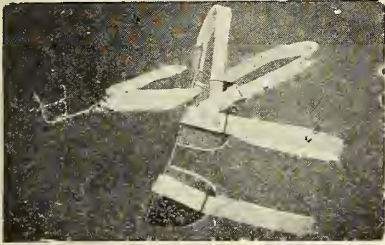
What are you doing for Hygeia? Will you not tell the conductor of this department in how many schools, libraries and doctor's offices this fine magazine has been placed in your county? Have you held any public meetings or been instrumental or helpful in the promotion of such? What was the subject of discussion and the leaders thereof? Have you studied or discussed cancer, syphilis, tuberculosis, child welfare in your program? Who were the speakers? What are your special objectives this year? The state chairman of press-publicity urges the press-publicity chairmen of constituent auxiliaries to write her, giving details of any and all purposes and achievements of their respective auxiliaries.

---

As a result of a rather comprehensive discussion with the management of the Journal about auxiliary's desires and needs as to publicity, a more satisfactory arrangement has been made. This editor may now safely promise that all news items of auxiliary work reaching her by the fifteenth of each month will gain prompt publication.

---

More and more frequently women, through organizations with which they are affiliated, are starting movements looking toward public betterment and are successfully concluding them, too. Women yield a tremendous influence in civic affairs when working unitedly and aggressively. Every women's club should have a standing committee on public health. Doctor's wives should have

**THE W. E. ISLE COMPANY**1121 Grand Ave.  
Entire Second FloorKansas City, Mo.  
Victor 2350*Immediate Delivery on Splints*Campbell  
Aeroplane  
ClavicleAbduction  
Splints  
Made-to-Order**PROMPT  
SERVICE****PROFESSIONAL PROTECTION**SINCE 1899  
SPECIALIZED  
SERVICE**A DOCTOR SAYS:**

"I came out of this near lawsuit at no cost to me (your Company paid it all) and with my nerves in good shape. I can't thank you enough."

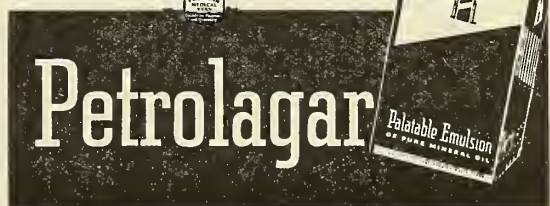
**THE****MEDICAL PROTECTIVE COMPANY**

OF FORT WAYNE, INDIANA

**WHEATON, ILLINOIS****JOHNSON HOSPITAL  
CHANUTE, KANSAS**Complete Clinical  
Laboratory  
Radium  
X-Ray**EXERCISE****FOR BOWEL REGULATION**

The patient who is unable to exercise or adhere to a suitable diet will appreciate the aid of Petrolagar to maintain a regular bowel movement. Petrolagar softens hard stools and assists the bowel to function normally. Its pleasant flavor, devoid of the oily taste associated with plain mineral oil, makes Petrolagar very easy to take. Prescribe Petrolagar for bowel management, it's "Council Accepted." Petrolagar Laboratories, Inc. • Chicago, Ill.

*Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.*





strong representation on such committees. If not all your clubs and organizations have committees on public health, Mrs. Doctor's Wife, why not move for such an addition?

We learn through Mrs. J. P. Simonds, national chairman of press-publicity, that the editor of the Journal of the A. M. A. desires items from state and county auxiliaries on actual accomplishments; that is, a record of how constituent auxiliaries are carrying out the programs recommended by national and state committees. All programs are made out only after consultation with and approval of the advisory committee of the medical society.

The Pratt County Auxiliary met at a special luncheon given in honor of Mrs. R. W. Urie, state president, January 12, at the Hotel Roberts, in Pratt. Mrs. F. E. Coffey of Hays and Mrs. F. L. Dennis of Dodge City also were guests. A business session was held after the luncheon at the home of Mrs. W. D. Pitman, during which Mrs. Urie addressed the group.

Mrs. Cyril Black and Mrs. J. R. Campbell both of Pratt, were Kansas auxiliary representatives at the annual meeting of the Oklahoma Clinical Society held in Oklahoma City during last November. They participated actively in the Oklahoma auxiliary's programs and served on the registration committee.

Mrs. F. A. Thorpe and Mrs. Cyril Black, both of Pratt, were delegates at the regional conference of the Kansas Tuberculosis and Health Association held recently in Wichita.

The auxiliary to the Milwaukee County Medical Society of Milwaukee, Wisconsin, demonstrates the value of informed auxiliary activity: Their public relations committee has placed more than eighty speakers, members of the medical society's speakers bureau, on the programs of lay organizations since January first. Their education committee has closely supervised advertising in the local press, on the radio and in store demonstrations. As a result of information thus obtained five or six demonstrators detrimental to public health were removed from stores

through action taken by the medical societies, and several similar advertisements will likewise be removed from radio programs.

The Wilson County Auxiliary recently entertained Mrs. R. W. Urie, state president, as guest of honor at dinner at the Brown Hotel, in Neodesha. Other guests were: Mrs. T. D. Blasdel and Mrs. N. C. Morrow, both of Parsons. The meeting was the regular monthly session and routine business was transacted after the dinner. Mrs. Urie gave an interesting account of her visits to the various auxiliaries in the state. Mrs. D. W. Basham, Wichita, gave an instructive talk on auxiliary work.

The Labette County Auxiliary met January 26 in Parsons at the home of Mrs. A. C. Baird. Mrs. N. C. Morrow gave a paper, "Digestion and Indigestion" and Mrs. T. D. Blasdel presented a review of Dr. Victor Heiser's paper, "A Trip Around the World." Mrs. R. W. Urie gave a state report. It was announced that Dr. R. H. Riedel, Topeka, would speak on venereal disease at a city parent-teacher association meeting in Parsons on February 17.

The Shawnee County Auxiliary, as representative of the Kansas Auxiliary, entertained Mrs. Augustus S. Kech, National President, as guest of honor at a luncheon in the Hotel Jayhawk, Topeka, March 2. Before the auxiliary luncheon was served Mrs. Kech addressed members of the Shawnee County Medical Society and guests at their luncheon, where she described the complexities of medical relief in Pennsylvania. At the auxiliary luncheon Mrs. Kech stressed the necessities of members becoming comprehensively informed on medical questions and taking this data into their lay organizations. The state officers present were: Mrs. R. W. Urie, Parsons, president; Mrs. C. O. West, Kansas City, secretary; Mrs. A. C. Flack, Fredonia, treasurer; Mrs. F. E. Coffey, Hays, president-elect; Mrs. J. B. Carter, Wilson, chairman of archives; Mrs. E. J. Nodurth, Wichita, exhibits chairman; Mrs. E. C. Duncan, Fredonia, legislative chairman; Mrs. L. B. Gloyne, Kansas City, organization chairman; Mrs. W. G. Emery, Barnard, publicity chairman. The luncheon was arranged by Mrs. F. C. Taggart, Mrs. J. E. Joss and Mrs. W. C. Menninger who also received as hostesses. Miss Maryann Firestone sang.

**Alcoholism  
Senility  
Drug Addiction**

## **A Modern Ethical Hospital at Louisville**

**Mental  
and  
Nervous Diseases**

**Founded 1904**

### **Beautiful And Spacious Grounds Afford Outdoor Relaxation**

Our **ALCOHOLIC** treatment destroys the Craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Whiskey withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

**MENTAL** patients have every comfort that their home affords.

Select cases of **SENILITY** accepted.

The **DRUG** treatment is one of Gradual Reduction; it relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

**NERVOUS** patients are accepted by us for observation and diagnosis, as well as treatment.

**Physiotherapy—Clinical Laboratory—X-Ray.**

**Consulting Physicians and Surgeons.**

**Request  
Rates and Folder**

## **THE STOKES HOSPITAL**

**Telephone,  
Highland 2101-2102**

**E. W. STOKES, M.D., Medical Director, 923 Cherokee Road, Louisville, Ky.**



## Cosmetics and Your Patient's Morale



THE DOCTOR IS OF NECESSITY A STUDENT OF LIFE. Each new patient presents a new study, a new problem. Psychology plays an important role in the course of treatment he prescribes. With some patients he must be frank to a point of harshness, with others he must be gentle and coaxing. The nature of the illness and, more particularly, the nature of the patient determine his attitude. He knows from experience the value of bolstering his patient's morale. As a student of psychology he knows that few things are more depressing to a woman than the fear that she is losing her charm; that when she no longer cares how she looks the chances are she has lost touch with a vital interest in life. And because he appreciates the importance of a sensible interest in personal appearance he quite rightly encourages his patients to look their best at all times. FINE COSMETICS appeal to that interest. That is why they deserve to be recommended by doctors who are, after all, greatly concerned with their patient's morale.

---

**LUZIER'S, INC., MAKERS OF FINE COSMETICS & PERFUMES**

---

KANSAS CITY, MO.



## Cook County Graduate School of Medicine

(In Affiliation with Cook County Hospital)  
Incorporated not for profit.

### ANNOUNCES CONTINUOUS COURSES

**SURGERY**—General Courses, one, two, three and six months; Two Weeks' Intensive Course in Surgical Technic with practice on living tissue; Clinical Course; Special Courses.

**GYNECOLOGY**—Two Weeks Intensive Course starting March 28th; Personal Courses.

**OBSTETRICS**—Two Weeks Intensive Course starting April 11th; Informal Course.

**FRACTURES AND TRAUMATIC SURGERY**—Informal Practice Course; Ten-day Intensive Course starting April 11, 1938.

**OTOLARYNGOLOGY**—Two Weeks' Intensive Course starting April 4, 1938.

**OPHTHALMOLOGY**—Two Weeks' Intensive Course starting April 18, 1938; Personal Course in Refraction.

**UROLOGY**—General Course One Month; Intensive Course Two Weeks; Special Courses.

**CYSTOSCOPY**—Ten-day Practical Course.

General, Intensive, and Special Courses in all Branches of Medicine and Surgery.

**TEACHING FACULTY—ATTENDING STAFF OF  
COOK COUNTY HOSPITAL**

Address: Registrar, 427 South Honore Street,  
Chicago, Illinois.

## A POSTGRADUATE COURSE NEUROPSYCHIATRY IN GENERAL PRACTICE

April 25 to 30, Inclusive

Lectures, case studies, seminars and clinical demonstrations by members of the staff dealing with the neurological and psychiatric problems encountered in general practice. Fourth annual presentation of this course.

**Limited to 30 members      Fee, \$35.00**

For details write Dr. Robert P. Knight

**THE MENNINGER CLINIC**  
TOPEKA      KANSAS

## Ambulance Service

To which you may  
trust your most  
gravely ill patient

NEW AMBULANCES  
TWO TRAINED ATTENDANTS

Rates: 15c a mile to any point in Kansas—  
everything included

WALL-DIFFENDERFER  
MORTUARY

Topeka,  
Kansas.

723 West 6th  
Phone 3-2326

## Behind MERCUROCHROME

(dibrom-oxymercuri-fluorescein-sodium)



*is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

**Hynson, Westcott & Dunning, Inc.**  
BALTIMORE, MARYLAND

### FAIRMOUNT MATERNITY HOSPITAL

Offers a modern fireproof hospital for the seclusion and care of the unmarried mother. Adoptions arranged if desired.

**FRED B. KYGER, M.D.**

Obstetrical Director

1414 East 27th Street,

Kansas City, Mo.

### CLASSIFIED ADVERTISEMENTS

Morphine and Other Drug Addictions—Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. 28 years' experience. Dr. Weirick's Sanitarium, 162 South State St., Elgin, Ill.



# Pure refreshment

## RADIUM

### —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

### —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

### —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

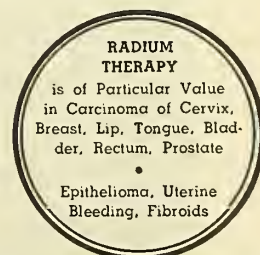
The complete service for Radium users

For details, address

**RADIUM AND RADON CORPORATION**

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO





When a liquid  
vasoconstrictor  
is indicated—

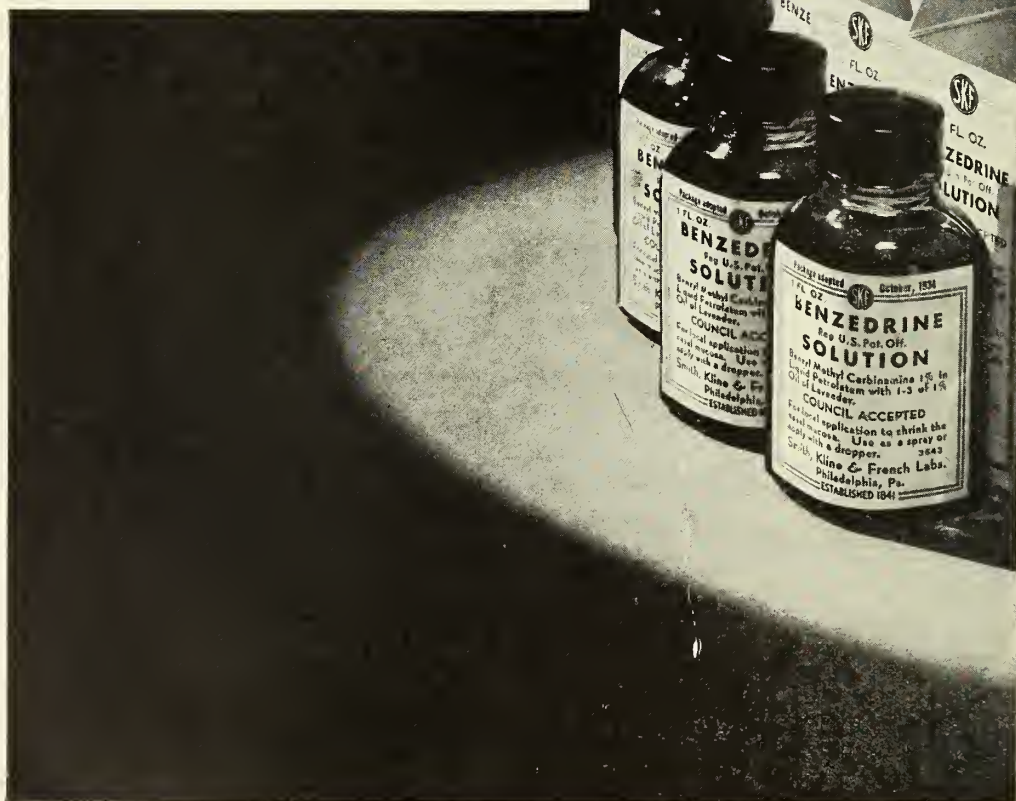
## BENZEDRINE\*

## SOLUTION

For shrinking the nasal  
mucosa in head colds,  
sinusitis and hay fever

\*Benzyl methyl carbinamine, S. K. F., 1 per cent  
in liquid petrolatum with  $\frac{1}{3}$  of 1 per cent oil  
of lavender. 'Benzedrine' is the trade mark  
for S.K.F.'s brand of the substance whose de-  
scriptive name is benzyl methyl carbinamine.

SMITH, KLINE & FRENCH LABORATORIES  
PHILADELPHIA, PA. • ESTABLISHED 1841



# **The Journal Of THE KANSAS MEDICAL SOCIETY**

*Owned and Published by The Kansas Medical Society*

---

Volume XXXIX

APRIL, 1938

Number 4

---

## *Greetings*

The Sedgwick County Medical Society, as host to the 79th Annual Session of The Kansas Medical Society, welcomes you to Wichita. Preparations for the meeting have been under way for one year, and under the able direction of the general chairman all plans for your instruction and entertainment have been completed.

The program on the following pages shows a well rounded out list of activities. The guest speakers are men of prominence in the medical world. The subject material is of general interest; facilities for instruction of the public along medical lines have been provided, and the entertainment is so varied as to please every taste.

Kansas physicians owe it to themselves and to their Society to attend the annual sessions for the purpose of considering scientific and economic problems; for instruction; for relaxation, and for the opportunity of renewing old friendships.

It is the wish of your host society that you help make the 79th Annual Session the greatest meeting of The Kansas Medical Society.

G. B. MORRISON, M.D.

President, Sedgwick County Medical Society.



*Schedule of Events***79TH ANNUAL SESSION  
THE KANSAS MEDICAL SOCIETY***Wichita--May 9, 10, 11, 12, 1938***MONDAY MAY 9**

9:00 A. M. TOURNAMENT KANSAS MEDICAL SKEET  
& TRAPSHOOTING ASSOCIATION

*Wichita Gun Club*

(Three miles west on Cannonball Highway)

10:00 A. M. TOURNAMENT KANSAS MEDICAL GOLFING ASSOCIATION

*Crestview Country Club*

(East on 21st Street)

6:30 P. M. ANNUAL STAG BANQUET

*Crestview Country Club*

**TUESDAY MAY 10**

REGISTRATION—North Entrance of Forum

Open from 8:00 a. m. to 6:00 p. m.

8:00 A. M. OPENING OF SCIENTIFIC & TECHNICAL EXHIBITS

*Rose Room—Forum*

FIRST GENERAL SESSION—Arcadia Theater—Forum

8:55 A. M. ADDRESS OF WELCOME

*G. B. Morrison, M.D.,*

President, Sedgwick County Medical Society

9:00 A. M. UNDULANT FEVER—ITS PRESENT CLINICAL STATUS

*F. E. Angle, M.D., Kansas City, Kansas*

9:40 A. M. DISEASES OF THE GALL BLADDER, BILE DUCTS & LIVER

*H. E. Robertson, M.D., Rochester, Minnesota*

10:20 A. M. INTERMISSION

10:45 A. M. THE MEDICAL ASPECTS OF CHILD BEHAVIOUR

*H. R. Casparis, M.D., Nashville, Tennessee*

11:25 A. M. FRACTURES OF THE HIP IN THE AGED WITH INDICATIONS  
FOR NAILS—BONE GRAFT

*W. B. Carrell, M.D., Dallas, Texas*

## ROUND TABLE LUNCHEONS

## 12:15 P. M. MEDICINE

*Allis Hotel*

Guests: F. E. Angle, M.D., Kansas City, Kansas

H. R. Casparis, M.D., Nashville, Tennessee

Presiding: Thomas Butcher, M.D., Emporia, Kansas

## 12:15 P. M. SURGERY

*Allis Hotel*

Guests: H. E. Robertson, M.D., Rochester, Minnesota

W. B. Carrell, M.D., Dallas, Texas

Presiding: John A. Dillon, M.D., Larned, Kansas

## SECOND GENERAL SESSION—Arcadia Theater—Forum

## 1:45 P. M. PRESIDENT'S ADDRESS

*J. F. Gsell, M.D., Wichita, Kansas*

President, The Kansas Medical Society, 1937-1938

## 2:45 P. M. ECONOMIC ASPECTS OF MEDICINE

*J. H. J. Upham, M.D., Columbus, Ohio*

President, American Medical Association, 1937-1938

## 3:05 P. M. INTERMISSION

3:30 P. M. INFANTILE PARALYSIS WITH SPECIAL REFERENCE TO  
TREATMENT IN EARLY STAGES*W. B. Carrell, M.D.*

## 4:10 P. M. MILE POSTS IN MODERN PSYCHIATRY

*L. J. Karnosh, M.D., Cleveland, Ohio*4:55 P. M. COOPERATION BETWEEN THE OPHTHALMOLOGIST AND HIS  
CONFRERES IN OTHER SPECIALTIES*T. D. Allen, M.D., Chicago, Illinois*

## 6:00 P. M. ALUMNI ROUNDUP BANQUET

*Spanish Ballroom, Lassen Hotel*

## 8:30 P. M. HOUSE OF DELEGATES

*Allis Hotel*

## WEDNESDAY MAY 11

## REGISTRATION—North Entrance of Forum

Open from 8:00 a. m. to 6 p. m.

## SECTION ON MEDICINE—Allis Hotel

## 9:00 A. M. CARDIO-VASCULAR SYPHILIS, DIAGNOSIS &amp; THERAPY

*Aaron Arkin, M.D., Chicago, Illinois*



## *Schedule of Events*

9:45 A. M. SOME SIGNIFICANT FEATURES OF HEMIPLEGIA  
*L. J. Karnosh, M.D.*

10:30 A. M. INTERMISSION

11:00 A. M. HEART DISEASES IN MIDDLE LIFE  
*J. H. J. Upham, M.D.*

### SECTION ON SURGERY—Arcadia Theater—Forum

9:00 A. M. SOME PRACTICAL CONSIDERATIONS IN THE TREATMENT OF  
CHRONIC GONORRHEA  
*A. I. Folsom, M.D., Dallas, Texas*

9:45 A. M. SOME ETIOLOGICAL CONSIDERATIONS OF CANCER OF THE  
LARGE BOWEL  
*Vernon C. David, M.D., Chicago, Illinois*

10:30 A. M. INTERMISSION

11:00 A. M. DIFFERENTIAL DIAGNOSIS OF BONE TUMORS  
*Dean D. Lewis, M.D., Baltimore, Maryland*

### ROUND TABLE LUNCHEONS

12:15 P. M. MEDICINE  
*Allis Hotel*  
Guests: Aaron Arkin, M.D., Chicago, Illinois  
L. J. Karnosh, M.D., Cleveland, Ohio  
Presiding: P. W. Morgan, M.D., Emporia, Kansas

12:15 P. M. SURGERY  
*Allis Hotel*  
Guests: A. I. Folsom, M.D., Dallas, Texas  
Dean D. Lewis, M.D., Baltimore, Maryland  
Vernon C. David, M.D., Chicago, Illinois  
Presiding: H. L. Snyder, M.D., Winfield, Kansas

12:15 P. M. SECRETARIES LUNCHEON  
*Colonial Room, Innes Tea Room*  
(121 South Broadway)

### THIRD GENERAL SESSION—Arcadia Theater—Forum

2:00 P. M. ALLERGY IN CHILDREN  
*H. R. Casparis, M. D.*

2:45 P. M. PATHOGENESIS & COMPLICATIONS OF DUODENAL ULCERS

*H. E. Robertson, M. D.*

3:30 P. M. INTERMISSION

3:45 P. M. SURGERY OF ULCER OF THE STOMACH & DUODENUM

*Vernon C. David, M.D.*

4:30 P. M. GENERAL CONSIDERATIONS OF THE PHYSIOLOGY OF THE  
NOSE AS PERTAINS TO GENERAL PRACTICE

*H. I. Lillie, M.D., Rochester, Minnesota*

7:00 P. M. ANNUAL BANQUET

*Innes Tea Room*

10:00 P. M. DANCE

*Innes Tea Room*

## THURSDAY MAY 12

REGISTRATION—North Entrance of Forum

Open 8:00 a. m. to 6:00 p. m.

FOURTH GENERAL SESSION—Arcadia Theater—Forum

8:30 A. M. HOUSE OF DELEGATES

*Allis Hotel*

9:00 A. M. STATISTICAL STUDY OF 500 CONSECUTIVE CASES OF  
TUBAL PREGNANCY

*H. O. Jones, M.D., Chicago, Illinois*

9:45 A. M. PRIMARY CARCINOMA OF THE LUNG: A REPORT OF 160 CASES  
IN FIVE YEARS

*Aaron Arkin, M.D.*

10:30 A. M. INTERMISSION

11:00 A. M. SURGERY & THE ENDOCRINES

*Dean D. Lewis, M.D.*

ROUND TABLE LUNCHEONS

12:15 P. M. MEDICINE

*Allis Hotel*

Guests: Aaron Arkin, M.D., Chicago, Illinois

A. I. Folsom, M.D., Dallas, Texas

Presiding: James Butin, M.D., Chanute, Kansas



## *Schedule of Events*

12:15 P. M. SURGERY

*Alis Hotel*

Guests: H. O. Jones, M.D., Chicago, Illinois

Dean D. Lewis, M.D., Baltimore, Maryland

Presiding: W. M. Mills, M.D., Topeka, Kansas

### FIFTH GENERAL SESSION—Arcadia Theater—Forum

1:45 P. M. INTRODUCTION OF N. E. MELENCAMP, M.D.

*President, The Kansas Medical Society, 1938-1939*

1:55 P. M. INTRODUCTION OF PRESIDENT-ELECT

2:00 P. M. HYPERTENSION AND CARDIO-VASCULAR-RENAL DISEASE

*Aaron Arkin, M.D.*

2:45 P. M. THE ETIOLOGY, DIAGNOSIS & TREATMENT OF ENDOMETRIOSIS

*H. O. Jones, M.D.*

3:30 P. M. TUMORS OF THE BREAST

*Dean D. Lewis, M.D.*

4:15 P. M. THE TREATMENT OF THE URINARY TRACT INFECTIONS

*A. I. Folsom, M.D.*

5:15 P. M. MOTION PICTURE "THE BIRTH OF A BABY"

*Courtesy Mead Johnson & Company*

## RADIO

Wichita's two radio stations—KFH and KANS—have generously arranged to broadcast thirteen talks by medical men during the state meeting. Speakers will be divided between the two stations. With the exception of Dr. J. H. J. Upham, President of the American Medical Association, all talks will be made by Kansas physicians. These talks have been prepared especially for this occasion and are for the laity. This is the first time this medium of lay education has been widely used in connection with a state meeting. Speakers and their subjects will be as follows:

Subject: *Medical Economics.*  
Dr. J. H. J. Upham, Columbus, Ohio.  
Subject: *Syphilis.*  
Dr. J. V. Van Cleve, Wichita, Kansas.  
Subject: *The Kansas Medical Society.*  
Dr. J. F. Gsell, Wichita, Kansas.  
Subject: *Maternal Welfare.*  
Dr. R. A. West, Wichita, Kansas.  
Subject: *Cancer Control.*  
Dr. H. L. Snyder, Winfield, Kansas.  
Subject: *Maternal Welfare.*  
Dr. H. J. Davis, Topeka, Kansas.  
Subject: *Eye.*  
Dr. C. J. Mullen, Kansas City, Kansas.

Subject: *Venereal Disease.*  
Dr. A. D. Gray, Topeka, Kansas.  
Subject: *Recent Advances in Surgery.*  
Dr. L. S. Nelson, Salina, Kansas.  
Subject: *Tuberculosis.*  
Dr. F. A. Trump, Ottawa, Kansas.  
Subject: *Behind the Doctor.*  
Dr. N. E. Melencamp, Dodge City, Kansas.  
Subject: *Recent Advances in Medicine.*  
Dr. P. W. Morgan, Emporia, Kansas.  
Subject: *Cancer.*  
Dr. C. C. Nesselrode, Kansas City, Kansas.  
Subject: *Tuberculosis.*  
Dr. C. F. Taylor, Norton, Kansas.

*Schedule of Events***79TH ANNUAL SESSION  
EYE, EAR, NOSE AND THROAT***May, 10, 11, 12***TUESDAY MAY 10**

REGISTRATION—North Entrance of Forum

Open 8:00 a. m. to 6:00 p. m.

*All meetings of this section on Balcony of Rose Room—Forum, unless otherwise designated*

9:00 A. M. HOW I DO REFRACTIONS

*T. D. Allen, M.D., Chicago, Illinois*

10:15 A. M. INTERMISSION

10:45 A. M. CERTAIN CONSIDERATIONS OF THE TONSIL

*H. I. Lillie, M.D., Rochester, Minnesota*

12:15 P. M. ROUND TABLE LUNCHEON

*Lassen Hotel*

Guests: T. D. Allen, M.D., Chicago, Illinois

*H. I. Lillie, M.D., Rochester, Minnesota*

Presiding: William Scales, M.D., Hutchinson, Kansas

2:25 P. M. CHRONIC SUPPURATIVE OTITIS MEDIA

*H. I. Lillie, M.D.*

3:40 P. M. INTERMISSION

4:55 P. M. COOPERATION BETWEEN THE OPHTHALMOLOGIST AND HIS  
CONFRERE IN THE OTHER SPECIALTIES*T. D. Allen, M.D.*

Delivered in Arcadia Theater—Forum

**WEDNESDAY MAY 11**

REGISTRATION—North Entrance of Forum

Open from 8:00 a. m. to 6:00 p. m.

*All meetings of this section on Balcony of Rose Room—Forum, unless otherwise designated.*

9:00 A. M. MANAGEMENT OF ACUTE SURGICAL MASTOIDITIS

*H. I. Lillie, M.D.*

10:15 A. M. INTERMISSION



*Eye, Ear, Nose and Throat*

10:45 A. M. EXTRINSIC MUSCLES

*T. D. Allen, M.D.*

12:15 P. M. ROUND TABLE LUNCHEON

*Lassen Hotel*

Guests: H. I. Lillie, M.D., Rochester, Minnesota

T. D. Allen, M.D., Chicago, Illinois

Presiding: R. E. Cheney, M.D., Salina, Kansas

2:00 P. M. IMPORTANCE OF ROUTINE IN AN OPHTHALMOLOGIST'S OFFICE

*T. D. Allen, M.D.*

3:15 P. M. INTERMISSION

4:30 P. M. GENERAL CONSIDERATIONS OF THE PHYSIOLOGY OF THE NOSE AS PERTAINS TO GENERAL PRACTICE

*H. I. Lillie, M.D.*

Delivered in Arcadia Theater—Forum

## THURSDAY MAY 12

REGISTRATION—North Entrance of Forum

Open 8:00 a. m. to 6:00 p. m.

*All meetings of this section on Balcony of Rose Room—Forum, unless otherwise designated.*

9:00 A. M. ANALYSIS OF BLIND PROGRAM OF KANSAS STATE BOARD OF SOCIAL WELFARE

*C. J. Mullen, M.D., Kansas City, Kansas*

10:15 A. M. INTERMISSION

10:45 A. M. HOARSENESS

*H. W. Powers, M.D., Topeka, Kansas*

12:15 P. M. ROUND TABLE LUNCHEON

*Lassen Hotel*

Guests: C. J. Mullen, M.D., Kansas City, Kansas

H. W. Powers, M.D., Topeka, Kansas

Presiding: J. G. Janney, M.D., Dodge City, Kansas

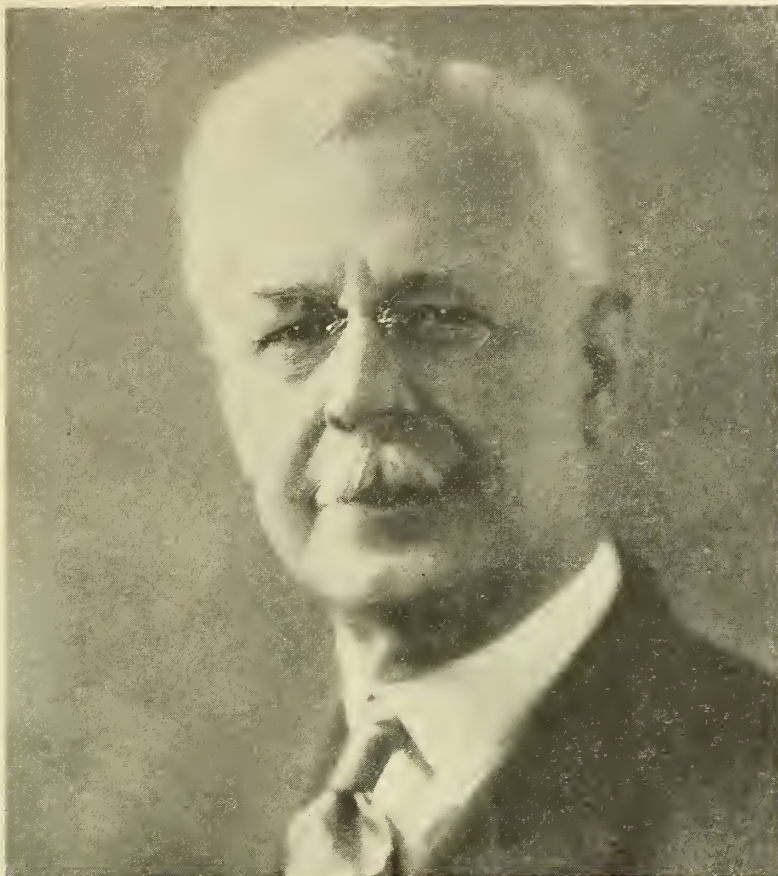
2:00 P. M. DIAGNOSIS & CLASSIFICATION OF SURGICAL MASTOIDITIS

*L. B. Spake, M.D., Kansas City, Kansas*

3:15 P. M. INTERMISSION

3:30 P. M. CYCLOPLEGICS, MYDRIATICS & MIOTICS

*Lyle S. Powell, M.D., Lawrence, Kansas*

79TH ANNUAL SESSION--*Speakers*

J. H. J. UPHAM, M.D., COLUMBUS, OHIO  
*President, American Medical Association, 1937-1938*

The Society is particularly honored in that Dr. J. H. J. Upham, President of the American Medical Association, will be a guest at the Wichita meeting.

Dr. Upham received his degree from the University of Pennsylvania and is at the present time Dean of the College of Medicine of Ohio State University. He has served in numerous capacities in organized medicine, both state and national, having served in A. M. A. offices continuously since 1913. He has also been a member of the National Board of Medical Examiners for the past six years.

Dr. Upham will address the General Session of the Society on Tuesday afternoon at 2:25 p. m. on the "Economic Aspects of Medicine". On Wednesday morning at 11:00 a. m., he will speak before the Section on Medicine at the Allis Hotel. His subject at that time will be "Heart Disease in Middle Life".

On Tuesday morning at 10:00 a. m., Dr. Upham will talk to the student body of the University of Wichita in the auditorium of that school on "Modern Trends in Medical Practice". He will also make a radio address for the laity on "Medical Economics" at a time to be announced later.



*Speakers*

T. D. ALLEN, M.D.

*Chicago, Illinois*

APPOINTMENTS: Associate Clinical Professor Rush Medical College, University of Chicago; Assistant Attending Ophthalmologist, Presbyterian Hospital; Attending Ophthalmologist, Illinois Eye and Ear Infirmary.  
DEGREE: M. D., Rush Medical College, 1915.

SPECIALTY: Ophthalmology.

MEMBER: American Academy of Ophthalmology and Oto-Laryngology; American Ophthalmological Society; American Board of Ophthalmology (certificate); American College of Surgeons; President-Elect, Chicago Ophthalmological Society; American Medical Association.

F. E. ANGLE, M.D.

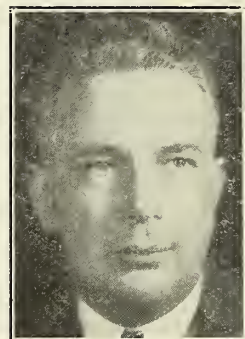
*Kansas City, Kansas*

APPOINTMENTS: Instructor, Department of Medicine, University of Kansas; Chief of Medical Division, Bethany Hospital; Attending Physician to St. Margaret's Hospital and Providence Hospital, Kansas City, Kansas.

DEGREE: M. D., University of Kansas, 1926.

SPECIALTY: Internal Medicine.

MEMBER: American Medical Association.



AARON ARKIN, M.D.

*Chicago, Illinois*

APPOINTMENTS: Associate Professor of Medicine at Rush Medical College, University of Chicago; Professor and Chairman of Department of Medicine, Cook County Graduate School of Medicine; Attending Physician, Cook County Hospital; Attending Physician, Mt. Sinai Hospital.

DEGREE: M. D., Rush Medical College, 1911.

SPECIALTY: Internal Medicine.

MEMBER: Fellow, American College of Physicians; American Board of Internal Medicine (certificate); American Medical Association.

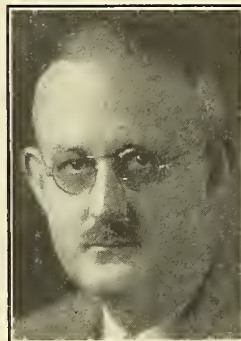
**H. R. CASPARIS, M.D.***Nashville, Tennessee*

APPOINTMENTS: Professor of Pediatrics, Vanderbilt Medical School; President, Tennessee Tuberculosis Association; Director, National Tuberculosis Association.

DEGREE: M. D., Johns Hopkins, 1919.

SPECIALTY: Pediatrics.

MEMBER: American Pediatric Society; American Academy of Pediatrics; American College of Physicians; American Medical Association.

**A. I. FOLSOM, M.D.***Dallas, Texas*

APPOINTMENTS: Professor of Urology, Baylor University.

DEGREE: M. D., Southern Methodist University Medical Department, 1908.

SPECIALTY: Urology.

MEMBER: American Urological Association; American College of Surgeons; American Medical Association.

**L. J. KARNOSH, M.D.***Cleveland, Ohio*

APPOINTMENTS: Associate Clinical Professor of Nervous and Mental Diseases, Western Reserve University School of Medicine; Resident Director, Neuro-psychiatric Division, City Hospital of Cleveland; American Board of Neurology and Psychiatry (certificate).

DEGREE: M. D., Western Reserve University, 1920.

SPECIALTY: Neuro-psychiatry.

MEMBER: American Psychiatric Association; Central Neuro-Psychiatric Association; American Medical Association.





*Speakers*

DEAN D. LEWIS, M.D.

*Baltimore, Maryland*

APPOINTMENTS: Professor of Surgery, Johns Hopkins University School of Medicine; Surgeon-in-Chief, Johns Hopkins Hospital; Past-President, American Medical Association.

DEGREE: M. D., Rush Medical College, 1899.

SPECIALTY: Surgery.

MEMBER: American Surgical Association; Southern Surgical Association; Western Surgical Association; American College of Surgeons; Society of Clinical Surgery; Society of Neurological Surgeons; American Medical Association.

H. I. LILLIE, M.D.

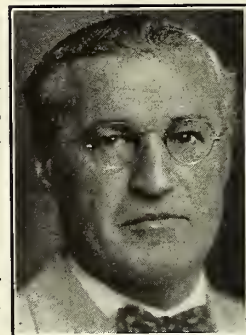
*Rochester, Minnesota*

APPOINTMENTS: Professor Otology, Rhinology, Laryngology, University of Minnesota; Head of Section of Otolaryngology, Mayo Clinic and Mayo Foundation; President-elect of American Laryngological, Rhinological, Otolological Society.

DEGREE: M. D., University of Michigan Medical School, 1912.

SPECIALTY: Otology, Laryngology and Rhinology.

MEMBER: American Academy of Ophthalmology and Oto-Laryngology; American Laryngological, Rhinological and Otolological Society; American College of Surgeons; American Otolological Society; American Laryngological Association; American Medical Association.



H. E. ROBERTSON, M.D.

*Rochester, Minnesota*

APPOINTMENTS: Head of Section on Pathological Anatomy, Mayo Clinic; Professor Pathology, University of Minnesota (Mayo Foundation).

DEGREE: M. D., University of Pennsylvania, 1905.

SPECIALTY: Pathology.

MEMBER: American College of Physicians; American Association of Pathologists and Bacteriologists; Board of Directors, American Society for the Control of Cancer; American Medical Association.

**W. B. CARRELL, M.D.***Dallas, Texas*

APPOINTMENTS: Professor of Orthopedic Surgery, Baylor University; Chief Surgeon, Texas Scottish Rite Hospital for Crippled Children.

DEGREE: M. D., Southern Methodist University, 1908.

SPECIALTY: Orthopedic Surgery.

MEMBER: American Orthopedic Association; American Academy of Orthopedic Surgeons; Clinical Orthopedic Society; American College of Surgeons; American Medical Association.

**VERNON C. DAVID, M.D.***Chicago, Illinois*

APPOINTMENTS: Chairman, Surgical Department, Rush Medical College, University of Chicago; Surgeon-in-Chief and President of Medical Staff, Presbyterian Hospital.

DEGREE: M. D., Rush Medical College, 1907.

SPECIALTY: Surgery.

MEMBER: American Surgical Association; Society of Clinical Surgery; American College of Surgeons; Western Surgical Association; Chicago Surgical Society; Southern Surgical Association; Institute of Medicine; Founders Group, American Board of Surgery; Chicago Pathological Society; American Medical Association.

**H. O. JONES, M.D.***Chicago, Illinois*

APPOINTMENTS: Associate Professor of Gynecology, Northwestern University Medical School; Senior Gynecologist and Chairman, Department of Obstetrics and Gynecology, St. Luke's Hospital, Chicago.

DEGREE: M. D., Rush Medical College, 1917.

SPECIALTY: Obstetrics and Gynecology.

MEMBER: American Gynecological Society; American Board of Obstetrics and Gynecology (certificate); Central Association of Obstetricians and Gynecologists; American College of Surgeons; Chicago Gynecological Society; American Medical Association.

**C. J. MULLEN, M.D.***Kansas City, Kansas*

APPOINTMENTS: State Supervising Ophthalmologist, Kansas State Board of Social Welfare, Division for the Blind; Instructor in Ophthalmology, University of Kansas.

DEGREE: M. D., Creighton University, 1923.

SPECIALTY: Ophthalmology.

MEMBER: American Academy of Ophthalmology and Oto-Laryngology; American Board of Ophthalmology (certificate); American Medical Association.

**LYLE S. POWELL, M.D.***Lawrence, Kansas*

APPOINTMENTS: Chairman, Committee on Conservation of Eyesight, The Kansas Medical Society.

DEGREE: M. D., University of Nebraska, 1925.

SPECIALTY: Ophthalmology, Oto-laryngology and Rhinology.

MEMBER: American Academy of Ophthalmology and Oto-Laryngology; American Board of Oto-laryngology (certificate); American College of Surgeons; American Medical Association.

**HAROLD W. POWERS, M.D.***Topeka, Kansas*

DEGREE: M. D., University of Iowa, 1927.

SPECIALTY: Ophthalmology, Oto-laryngology and Rhinology.

MEMBER: American Board of Oto-laryngology (certificate); American Medical Association.

**L. B. SPAKE, M.D.***Kansas City, Kansas*

APPOINTMENTS: Assistant Professor of Otorhinolaryngology, University of Kansas.

DEGREE: M. D., University Medical College of Kansas City, 1913.

SPECIALTY: Otorhinolaryngology.

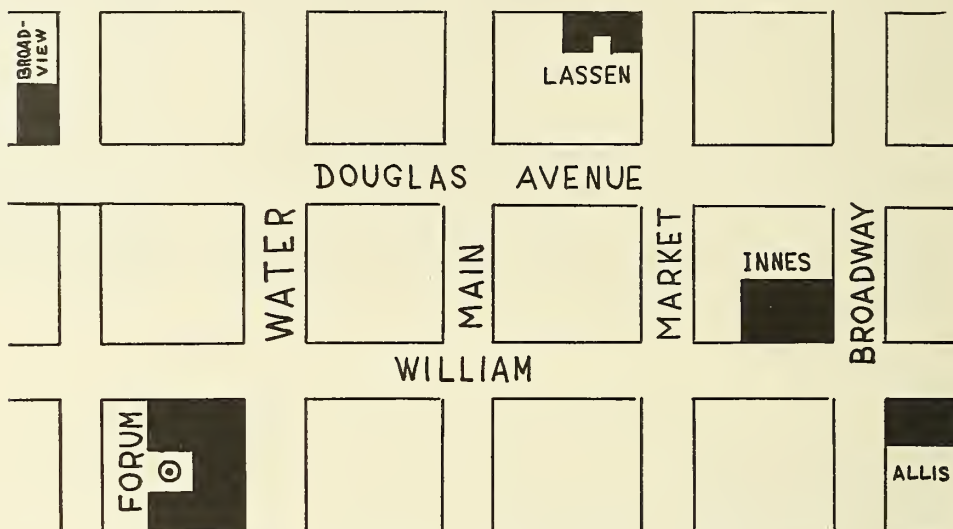
MEMBER: American Academy of Ophthalmology and Oto-laryngology; American Board of Ophthalmology; American College of Surgeons; American Medical Association.



## THE WICHITA FORUM

The 79th Annual Session will be held in the Wichita Forum, which is the largest auditorium and convention hall in Kansas, and which covers nearly a city block.

Registration facilities, technical and scientific exhibits will be housed in the Rose Room



WICHITA—MEETING PLACES AND HOTELS

which is located in the northeast portion of the structure. General Assemblies will take place in the Arcadia Theater, adjacent to, and opening from the Rose Room. The Eye, Ear, Nose and Throat section meetings will be held on a balcony also opening from the Rose Room.

The Hall of Health, a detailed floor plan of which appears on page 148 of this issue, will be situated in the Arena at the south end of the building, and although under the same vast roof, will be entirely separate from the scientific meetings.

## REGISTRATION

*Every member must register before he is entitled to attendance at any of the events of the meeting.* There is no registration fee. Only requirement for registration is membership in a county medical society and presentation of a 1938 membership card. Registration by any other means requires certification of the secretary of the county medical society of residence or by an officer of the Society.

Registration headquarters will be immediately inside the Rose Room, at the North entrance of the Forum, second floor, and will be open from 8:00 a. m. to 6:00 p. m. each day. Tickets for the Annual Banquet, Round Table Luncheons, etc., will be on sale daily at the Registration Desk. Members are urged to utilize this desk in all ways possible for convenience and assistance. Physicians expecting emergency or urgent calls may leave word at this place and any other service desired will be gladly given upon request. Page service will be available to facilitate the handling of telephone calls and the delivery of communications and telegrams.

## **SEDGWICK COUNTY COMMITTEES**

All arrangements for the 79th Annual Session have been made by a group of committees of Sedgwick County Medical Society, headed by Dr. F. J. McEwen as General Chairman, and Dr. E. L. Mills as Treasurer. The various committee chairmen are as follows: Program, Dr. R. A. West; Commercial Exhibits, Dr. A. W. Fegtly; Publicity, Dr. Geo. Gsell; Entertainment, Dr. H. E. Marshall; Women's Events, Dr. E. J. Nodurfth; Golf and Skeet, Dr. J. W. Shaw and Dr. L. A. Sutter; Greeters, Dr. J. D. Clark; Arrangements, Dr. W. P. Callahan; Scientific Exhibits, Dr. C. A. Hellwig; and Hall of Health, Dr. N. L. Rainey.

## **HOUSE OF DELEGATES**

Two meetings of the House of Delegates will be held during the Wichita Session. Both of these will be at the Allis Hotel, the first at 8:30 p. m. on Tuesday, May 10, and the second at 8:30 a. m. on Thursday, May 12.

The Constitution and By-Laws provides that each county medical society shall be entitled to send to the House of Delegates each year, one duly qualified delegate for every twenty members, and one duly qualified delegate for each major fraction thereof; provided that each component society has made its annual report and paid its assessments as provided in the Constitution and By-Laws shall be entitled to at least one duly qualified delegate. In the event that a delegate finds it impossible to attend, the By-Laws provide that he shall appoint an alternate to attend and serve in his place and that each such alternate shall qualify himself to the Committee on Credentials. In the event a particular component society is not represented by either a delegate or alternate at a meeting of the House of Delegates, that body by majority vote may elect a member of that component society to serve as a delegate for that meeting.

Many matters of extreme importance are scheduled upon the agenda for this year's meetings, and every county medical society is urged to have its delegates or alternates present at both of the meetings.

All interested members of the Society other than Delegates are invited to attend the meetings.

## **SECRETARIES LUNCHEON**

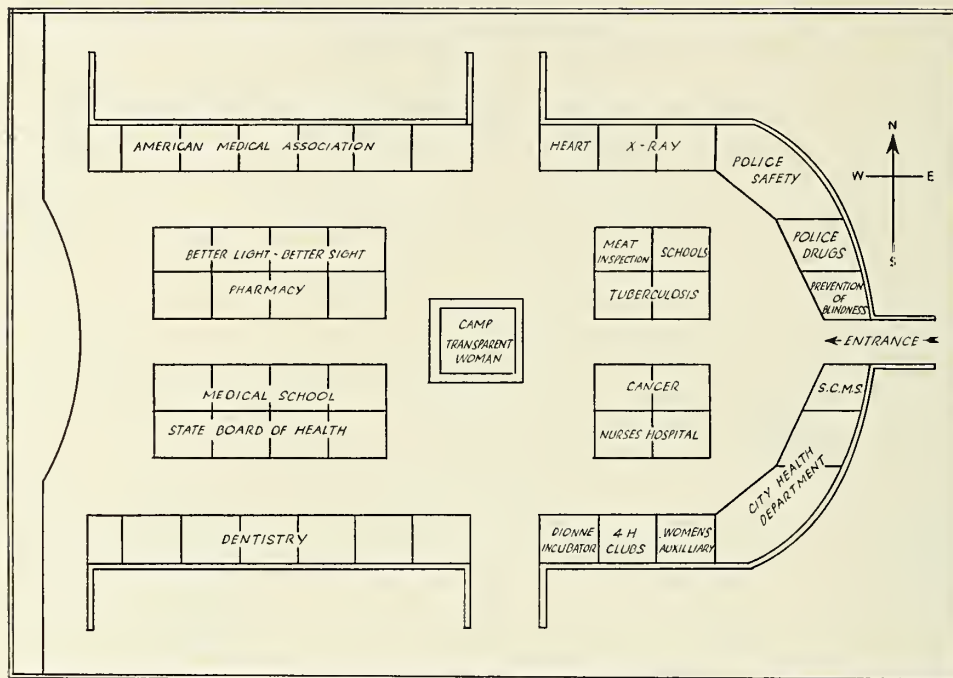
A luncheon for secretaries of county medical societies will be held at 12:15 p. m., Wednesday, May 11, in the Colonial Room of the Innes Tea Room (121 South Broadway). The program will consist of informal discussion of various important business and organization problems of the county and state Society. All county medical society secretaries are urged to attend this meeting. Tickets will be on sale at the Registration Desk.

## **PAGE SERVICE**

Several pages will be on duty constantly during the session, to assist members in all ways possible and to facilitate the handling of telephone calls and urgent communications. Members expecting emergency calls are requested to notify the Registration Desk.



## HALL OF HEALTH



FLOOR PLAN—HALL OF HEALTH

Wichita—May 7-16, 1938

### WHAT IS IT?

The Hall of Health is an exposition designed for the public to bring in a visual manner the story of the parts medical science, dentistry, public health and allied agencies play in safeguarding and protecting the health of mankind.

It is patterned to a degree after an exhibition held last year in Milwaukee which drew over 100,000 persons. The idea for such an educational enterprise developed from the success of the Hall of Man in Dresden, Germany, which was followed by the Hall of Science at the Century of Progress. The Hall of Health is sponsored by the Sedgwick County Medical Society.

### WHAT WILL BE SHOWN?

Fifty or more display sections housing exhibits of unusual interest and educational value. The anatomy of the human body will be visualized by means of the famous Camp Transparent Woman. This life-sized figure of a woman is built over an actual skeleton; the internal organs are reproduced in natural color and are illuminated successively as a lecture unfolds the physiology of woman. The entire figure is covered with a transparent material.

The incubator in which the Dionne Quintuplets were placed in the early weeks of life.

An exhibit on embryology showing the stages of development of the baby before birth.

Several exhibits showing the development and proper care of the teeth and facts about tooth problems.

Diseases such as tuberculosis, syphilis and cancer will be explained and the proper methods of safeguarding health against their ravages will be outlined.

A life-sized x-ray of the human body, an x-ray machine and other interesting exhibits on radiology.

An "Iron Lung" or respirator.

Facts about marihuana and narcotics.

Measures to preserve eyesight, proper and improper lighting.

Health protective measures used in the public schools and in the 4-H clubs, will be demonstrated.

An exhibit on pharmacy showing the history of drugs, and facts of importance relating to the field of pharmaceuticals.

A human heart, amplified many times.

And many other exhibits of interest to the laity.



CAMP TRANSPARENT WOMAN

## WHEN?

The Hall of Health will be open 10 days, May 7 to May 16.

## WHERE?

In Wichita, in the huge main arena of the Forum, which covers 11,000 square feet of floor space. (Adjacent to, but separate and apart from the Society meeting.)

## WHY A HALL OF HEALTH?

Because the public is demanding to know more and more about what goes on in this rapidly moving age, and because the individual is primarily interested in his



health, which is his greatest asset. The Hall of Health shows how the activities of medicine, dentistry, pharmacy, nursing, hospitals and allied agencies are correlated as a means of protecting and preserving health. Because this offers the individual an opportunity to acquaint himself with the facts about the human body and its functions.

## ALUMNI BANQUET

Tuesday evening, May 10, will be "Alumni Night." The Alumni banquet will start at 6 o'clock in the spacious Spanish Ballroom of the Lassen Hotel. Representatives of the various medical schools will be seated at separate tables in the ball room. An interesting program has been arranged. At press time it appears that Count Ludvig Von Graussburg, of Berlin, Germany, will be able to appear on the program that evening. The Count has been close to the administrative side of medical practice in Germany for a number of years and is recognized on the Continent as an authority on so-called state medicine. He presents the true picture of panel practice. The banquet will adjourn shortly after 8 p. m. before the House of Delegates meeting. The price \$1.25. Tickets can be obtained at the Registration Desk.

## ANNUAL BANQUET AND DANCE

The annual banquet for members and their wives—will be presented on Wednesday evening at the Innes Tea Room commencing at 7 p. m. An unusual and interesting program has been planned. Dacing will begin at 10 p. m.

Tickets will be available at the Registration Desk.

## THE KANSAS STATE HOSPITAL ASSOCIATION

The Kansas State Hospital Association will hold its annual meeting at the Allis Hotel, Wichita, on May 10 and 11, commencing at 1:00 p. m. on May 10.

All interested members of The Kansas Medical Society are urged and invited to attend any portions of the Hospital Association program desired. This program will include the following events (also several others of which details have not yet been announced): Addresses by Melvin Sutley, Past President, and Trustee, Pennsylvania Hospital Association, and T. R. Ponton, M.D., Editor, Hospital Management, Chicago, Illinois; "The Treatment of Fractures", Howard E. Snyder, M.D., Winfield, Kansas; "New Curriculum", Miss Erma Law, Superintendent of Nurses, Wesley Hospital, Wichita, Kansas; an address by Father Wm. Schaefer, Litt. M.; and two round table discussions conducted by A. R. Hatcher, M.D., Wellington, Kansas, Chairman, Committee on Hospital Survey of The Kansas Medical Society.

Officers of the Kansas State Hospital Association (which to date numbers eighty-seven Kansas hospitals as active members) are as follows: President, Rev. J. E. Lander, Wesley Hospital, Wichita, Kansas; First Vice President, Frances Cooper, Newman Memorial County Hospital, Emporia, Kansas; Second Vice President, Ann C. McBride, Community Hospital, Beloit, Kansas; and Secretary-Treasurer, Dorothy H. McMasters, Newton Memorial Hospital, Winfield, Kansas.

## SCIENTIFIC EXHIBITS

The section of scientific exhibits will be the largest in the history of the Society and will include interesting displays from almost every field of medical endeavor.

These will be located in the Rose Room of the Forum and will be open from eight a. m. to six p. m., daily throughout the meeting. Displays are arranged in groups of medical specialties.

Exhibits included herein will be as follows:

### ALLERGY AND ENDOCRINOLOGY

#### Allergy and the Home

ALLEN OLSON, M.D., WICHITA, KANSAS

A miniature home showing the source of many allergic manifestations.

#### Thyroid Gland in College Girls

FRANCES H. SCHILTZ, M.D., WICHITA, KANSAS

Charts showing incidence of enlarged thyroid, basal metabolism, physical characteristics and academic standing of girls enrolled at Wichita University.

#### Clinical Endocrinology

HENRY H. TURNER, M.D., Oklahoma City, Oklahoma

This exhibit consists of photographs illustrating the various accepted types of endocrinopathies and results of treatment. Among the cases illustrated are: The effects of anterior-pituitary growth hormones on pituitary dwarfism; the effect of anterior-pituitary sex hormones on genital aplasia associated with adiposogenital syndrome; the effect of anterior-pituitary-like hormones on descent of testes; the effect of partial adrenal resection denervation and splanchnic section on patients with pituitary-adrenogenital syndromes; and the author's more recent clinical studies with synthetic male sex hormones in the treatment of hypogenitalism, male climacteric, impotency, cryptorchidism, and gynecomastia.

## CANCER

#### Radium Treatment of Cancer of the Mouth

CHICAGO TUMOR INSTITUTE, MAX CUTLER, M.D., DIRECTOR

Charts and photographs demonstrating radium treatment. A moving picture showing technique of preparing vulcanite dental moulds for use in treatment of cancer of the mouth and lip. Also interstitial radiation in the treatment of cancer of the mouth will be demonstrated.

#### Bone Tumors

C. H. WARFIELD, M.D., WICHITA, KANSAS

Prints showing bone tumors and bone lesions simulating bone tumors.

#### Proctological Tumors

CLAUDE C. TUCKER, M.D., WICHITA, KANSAS

Exhibit of transparencies and pathological specimens mounted in gelatin. Gross and microscopic findings of malignant and benign proctological tumors are illustrated.

#### Abdominal Tumors

C. A. HELLWIG, M.D., WICHITA, KANSAS

Transparencies and pathological specimens illustrating abdominal tumors with obscure symptoms. Incidence and location of one hundred abdominal tumors in which exploratory laparotomy was indicated in spite of exhaustive clinical studies.

#### Maltreated Skin Cancer

J. G. MISSILDINE, M.D., and J. V. VAN CLEVE, M.D., WICHITA, KANSAS

Colored photographs of patients with skin cancer after treatment by cancer quacks.

#### X-Ray Diagnosis of G. I. Lesions

ANTHONY F. ROSSITTO, M.D., WICHITA, KANSAS

Exhibit of films depicting gastro-intestinal lesions. Shown in viewing frames with description of clinical symptoms.



## INTERNAL MEDICINE

## Hematology

J. L. LATTIMORE, M.D., TOPEKA, KANSAS

Pictures and slides of various blood dyscrasias, as well as normal. Hematological diagnosis of primary anemia, the leukemias, neutropenia, various secondary anemias, etc.

## Electrocardiography—Coronary Thrombosis

MAURICE SNYDER, M.D., SALINA, KANSAS

An exhibit of transparencies demonstrating normal and abnormal electrocardiograms with their interpretation, and demonstration of electrocardiologic pathology by means of cardio-diagrams. Also a special exhibit showing application of new type chest leads made according to standardization of the American Heart Association with illustration of classic, progressive changes found in coronary thrombosis.

## Lag Screen EKG and Cathode-Ray Phonocardiogram

GRAHAM ASHER, M.D., FRANK HOECKER, M.D., AND GEO. A. WALKER, M.D. KANSAS CITY, MISSOURI

This equipment will demonstrate in a visual way the electrical impulses going through the heart, and will also illustrate the sound waves occurring as a result of the actions of the valves. They will give a visual demonstration of the efficiency of the heart action.

## The New Born Infant

F. C. NEFF, M.D., KANSAS CITY, MISSOURI

An exhibit of wax models, demonstrating various conditions seen in the newborn.

## Wooden Lung

GEO. A. WALKER, M.D., KANSAS CITY, KANSAS

Demonstration of a new wooden lung to take the place of the Drinker Respirator. There is nothing new about this, but the point of the exhibit is to demonstrate the fairly efficient respirator actually used at the University of Kansas Hospitals, constructed at a cost of about \$125.00. It can be built by any competent carpenter; this one having been built by the school carpenter.

## Treatment of Early Syphilis

AMERICAN MEDICAL ASSOCIATION

An exhibit shown in conjunction with the United States Public Health Service, emphasizing the necessity for the treatment of early syphilis and showing various methods with the results that can be expected.

## Practical Bacteriological Methods

MAURICE L. JONES, M.D., WICHITA, KANSAS

Exhibit of cultures and other bacteriological methods.

## LARYNGOLOGY

## Foreign Bodies Removed from Air and Food Passageways

GALEN TICE, M.D., AND L. B. SPAKE, M.D., KANSAS CITY, KANSAS

Exhibit of removed foreign bodies. X-ray films of foreign bodies in situ.

## Laryngo-Stroboscope

LYLE S. POWELL, M.D., LAWRENCE, KANSAS

Instrument and apparatus for viewing the vocal cords in slow motion.

## PSYCHIATRY

## The Menninger Clinic and The Southard School

THE MENNINGER CLINIC, TOPEKA, KANSAS

Moving pictures, charts, photographs of methods of school work. Pottery, woodwork and paintings made by pupils of the school, copies of the school newspaper, etc.

## Historical Review: Care and Treatment of the Mental Patient

NEUROLOGICAL HOSPITAL, KANSAS CITY, MISSOURI

Illustrative, with descriptive reading matter, authentic pictures of old theories and practices, compared with the best and worst methods of today.

## Experiences in Insulin Shock Therapy

G. WILSE, ROBINSON, JR., M.D., KANSAS CITY, MISSOURI

Charts and graphs showing the various uses of insulin and the results with laboratory and clinical graphs showing the reaction of the patient in relation to psychotic improvement.

## SURGERY, ORTHOPEDICS &amp; GYNECOLOGY

## Endometriosis

J. D. CLARK, M.D., AND HOWARD C. CLARK, M.D., WICHITA, KANSAS

Endometriosis, stressing etiology and pathology. Water color paintings of gross and microscopic pathology in a series of twenty-nine cases at Sedgwick County and St. Francis Hospitals, 1931 to 1938. Photographs of endometriosis in pelvic organs.

## Giant Cell Tumor, Tibia

A. P. GEARHART, M.D., AND L. E. KNAPP, M.D., WICHITA, KANSAS

Bone graft; follow-up record; end result in four years. X-ray exhibit of case.

## Severe Burns with Contracture Deformities—Reconstruction

A. E. HIEBERT, M.D., WICHITA, KANSAS

Cases of severe burns with photographs of patients before and after reconstructive surgery.

## Unusual Surgical Cases

A. C. EITZEN, M.D., HILLSBORO, KANSAS

Tuberculous contracted kidney, benign gastric polyp, regional ileitis with involvement of cecum, and tumor of Gartner's duct, with pathologic specimens and x-rays of the first three.

## Nailing Fractures of the Femur Neck

CHARLES ROMBOLD, M.D., WICHITA, KANSAS

X-rays demonstrating the steps of a closed reduction of a fracture of the femoral neck and the blind nailing of those fractures.

## Temporary Splints for Poliomyelitis

AMERICAN MEDICAL ASSOCIATION

An exhibit from the Council of Physical Therapy demonstrating the materials and methods used in constructing temporary splints to be used in early care of poliomyelitis and other paralytic patients, including table display of necessary equipment and finished splints.

## A New Type Walking Iron

HOWARD E. SNYDER, M.D., WINFIELD, KANSAS

A model of the walking iron applied to a plastic cast and one unapplied. There will also be two walking irons used on one patient who had a fracture of the right tibia and a Potts fracture of the left angle simultaneously. Photographs of four or five patients showing original x-rays and final x-rays, and some pictures of the patient with cast and walking iron applied.

## Urinary Stone

NELSE F. OCKERBALD, M.D. AND HJALMAR E. CARLSON, M.D., KANSAS CITY, MISSOURI

The chemical analysis of urinary calculi, their method of formation and the principles of treatment. Prints of x-ray plates of various types of urinary calculi are also shown.

## Technic for Colostomy—Technic for Herniorrhaphy

THOMAS G. ORR, M.D., KANSAS CITY, KANSAS

Two types of new operations; one for colostomy and the other for a hernia.

## Paralytic Ileus

WLFRED COX, M.D., WICHITA, KANSAS

Models and posters demonstrating management of paralytic ileus.

## Effect of Prostatic Enlargement on the Kidneys

E. A. PICKENS, M.D., WICHITA, KANSAS

Photographs and mounted specimens illustrating gross and microscopic pathology of kidneys, bladder and ureters.



## Tempora-Mandibular Joint Syndrome

E. M. SEYDELL, M.D., WICHITA, KANSAS

Photographs, x-rays, models showing defects in articulations and method of correcting the existing mal-articulation.

## MISCELLANEOUS

## The Kansas Medical Auxiliary

MRS. E. J. NODURFTH, WICHITA, STATE EXHIBIT CHAIRMAN

Scrap-books, posters, maps and diagrams to show the work being done by the various county auxiliaries. Also an example of a medieval drug store. Two attendants on duty at all times.

## Medicolegal Topics

AMERICAN MEDICAL ASSOCIATION

An exhibit from the Bureau of Legal Medicine and Legislation dealing with the annual registration of physicians, laws concerning barbituric acid compounds, reporting of gunshot wounds, liens for medical services, compulsory health insurance and similar topics.

## HOTEL ACCOMMODATIONS

Although Wichita has several excellent hotels, and it is believed that the accommodations available will be entirely adequate, it is suggested that every member who plans to attend the 79th Annual Session, write immediately to the manager of the hotel selected for reservations. The following is a listing of the various Wichita hotels with the location and rates:

Hotel and Location	Single	Double	Twin Beds	Four Persons
ALLIS	\$3.00			
William & Bdwy	to	\$4.50	\$5.00	\$8.00
3 Blks., Forum	\$5.00			
LASSEN	\$2.50	\$4.00	\$5.00	\$7.00
First & Market	to	to	to	to
4 Blks., Forum	\$4.50	\$5.00	\$6.00	\$8.00
BROADVIEW	\$2.00	\$3.00	\$4.00	\$5.00
Douglas & Waco	to	to	to	to
2 Blks., Forum	\$3.50	\$5.00	\$5.00	\$6.00
COMMODORE				
(Apr. Hotel)	\$2.50	\$3.00		
222 E Elm	to	to	\$3.50	\$6.00
9 Blks., Forum	\$5.00	\$6.00		
McCLELLAN	\$1.50	\$2.50		\$5.00
201 S Bdwy.	to	to		
3 Blks., Forum	\$2.50	\$3.50		
EATON	\$1.50	\$2.00		\$3.00
523 E Douglas	to	to		to
7 Blks., Forum	\$2.00	\$2.50		\$4.00
SKAER	\$1.25	\$2.00		
231 S Bdwy.	to	to	\$2.50	\$4.00
3 Blks., Forum	\$1.50	\$2.50		
CORONADO	\$1.00	\$1.50		\$3.00
126 S. Main	to	to		to
1 Blk., Forum	\$2.00	\$2.50		\$4.00
HAMILTON	\$1.50	\$1.50		\$3.00
234 S. Main	to	to		to
2 Blks., Forum	\$2.25	\$2.75		\$4.00

## TECHNICAL EXHIBITS

The section of Technical Exhibits, which is also the largest in Society history, will be displayed in the Rose Room of the Forum adjacent to the General Assembly Room, from eight a. m. to six p. m. daily throughout the meeting.

Intermissions have been arranged during the scientific sessions for inspection of these exhibits, and it is believed that every member will find them of great interest as many new preparations and a variety of new equipment will be shown.

Exhibitors in attendance will be as follows:

### Booth No. 1—C. B. FLEET COMPANY

While attending the 79th Annual Meeting, visit the Phospho-Soda booth, exhibiting Phospho-Soda (Fleet), a normalizing eliminant, a detoxifying agent and buffer saline.

### Booth No. 2—COLE CHEMICAL COMPANY

This exhibit will consist of various pharmaceuticals and will be in charge of Mr. W. G. Phillips, representative of the Cole Company.

### Booth No. 3—J. B. LIPPINCOTT COMPANY

An exhibit of various medical publications, including both well-known texts and outstanding new works, for the general practitioner, the student and the specialist.

### Booth No. 4—The COCA-COLA COMPANY

Members are invited to stop at this booth for the "Pause that refreshes".

### Booth No. 5—THE KELLEY-KOETT MANUFACTURING COMPANY

X-ray equipment of all types for office and hospital use.

### Booth No. 6—HOLLAND-RANTOS COMPANY

This will include a complete line of specialties, Rantosilk aprons for laboratory use, Rantosilk sheeting, and similar products.

### Booth No. 7—JONES METABOLISM EQUIPMENT COMPANY

Demonstration of Jones Motor Basal, 1938 model, which carries a lifetime guarantee, provides instantaneous readings, is spill-proof and silent. Suitable for either office or hospital use.

### Booth No. 8—AMERICAN OPTICAL COMPANY

A display of AO lenses, (Pantopik and Ful-Vue, Tillyer, Cruxite, etc.) frames, mountings, refraction equipment, diagnostic sets, the new May Ophthalmoscope and the Prism Ophthalmoscope.

### Booth No. 9—HORLICK'S MALTED MILK CORPORATION

Nourishing, digestible, appetizing, these are the three outstanding qualities for which Horlick's is famous, either the powdered or tablet form. Visit Booth No. 9. You will be interested in the many dietary uses—from infant feeding to old age—note especially the convenience of the tablets, for interval feeding, in ulcer diets.

### Booth No. 10—THE W. E. ISLE COMPANY

A display of Isle Superior Limbs, Isle Special Limbs, orthopedic appliances, surgical supports, elastic hosiery, trusses, crutches, canes, etc.

### Booth No. 11—THE ZEMMER COMPANY

The booth will be in charge of Mr. W. H. Alexander, who will show the Zemmer line of pharmaceuticals, manufactured exclusively for the medical profession.

### Booths No. 12 & 13—W. A. ROSENTHAL X-RAY COMPANY

Westinghouse X-Ray units and equipment, also physical therapy apparatus, will be demonstrated in this booth by the Rosenthal Kansas representatives.



**Booth No. 14—RIGGS OPTICAL COMPANY**

The Riggs Optical Company will have on display a complete line of modern Bausch and Lomb refracting room equipment consisting of the Bausch and Lomb De Luxe Hydraulic Unit on which is mounted the Green's Refractor, Keratometer, Current Controller, and cord handles equipped with Ophthalmoscope and Retinoscope. They will also exhibit the projection test apparatus designed by Ferree-Rand embodying controlled illumination. Among other instruments on display will be the Bausch and Lomb Binocular Ophthalmoscope, which gives the operator a binocular, stereoscopic view of the fundus with or without dilation of the pupil. There will also be on display the Wottring Rotoscope for orthoptic training, which is of increasing interest to all eye men. In addition to the instrument line there will be a complete line of Bausch and Lomb frames, mountings, lenses, and cases. Demonstrations will be gladly given and questions of any kind are invited.

**Booth No. 15—E. R. SQUIBB & SONS**

A large assortment of Squibb preparations and specialties and a number of interesting new items will be displayed, and well informed Squibb representatives will be on hand to furnish any information desired on the products shown.

**Booth No. 16—LEPEL HIGH FREQUENCY LABORATORIES, INC.**

X-ray units, physical therapy equipment, etc., will be featured in this display.

**Booth No. 17—PHILIP MORRIS & COMPANY, LTD.**

Philip Morris & Co. Ltd. Inc. will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches and problems on the physiological effects of smoking.

**Booth No. 18—MEAD JOHNSON & COMPANY**

Representatives of this company will be prepared to discuss a number of new products and services, as well as a variety of Mead Johnson preparations which have been known to physicians for some time.

**Booth No. 19—THE MEDICAL PROTECTIVE COMPANY**

Ask The Medical Protective Company's representative to explain how his company meets the exacting requirements of adequate liability protection, which are peculiar to the professional liability field.

**Booths No. 20 & 21—THE MID-WEST SURGICAL SUPPLY COMPANY**

This booth will be under the supervision of Mr. Fay Martin and will feature a display of modern surgical instruments and office equipment.

**Booth No. 22—THE C. V. MOSBY COMPANY**

Physicians are invited to stop at this booth to look over a large number of recently published texts, new editions of older works, etc.

**Booth No. 23—A. S. ALOE COMPANY**

A. S. Aloe Company, in Booth No. 23, will display a general line of surgical instruments, supplies and equipment for the physician and hospital. The Aloe Short Wave Diatherm, the deBakey Blood Transfusion Instrument and many other specialties will be featured. Mr. Max Coe and Mr. Martin Hersh, Aloe representatives, will supply those interested with brochures on Aloe Steeline, the most modern creation in physician's fine treatment room furniture.

**Booth No. 24—TULSA MEDICAL DISTRIBUTORS**

An exhibit of the line of pharmaceuticals handled by this firm.

**Booth No. 25—GREB X-RAY COMPANY**

This company will exhibit new and interesting x-ray apparatus for office and hospital use.

**Booth No. 26—GEORGE E. BREON & COMPANY**

Breon representatives will show a line of Breon pharmaceuticals and descriptive literature.

**Booth No. 27—STEFFEN ICE & ICE CREAM COMPANY**

An interesting display of various dairy products.

**Booths No. 28 & 29—GENERAL ELECTRIC X-RAY CORPORATION**

New G-E X-Ray machines, fever therapy apparatus, physical therapy equipments, etc. will be demonstrated by General Electric.

**Booth No. 30—S. H. CAMP & COMPANY**

Camp Surgical and Maternity Supports will be displayed by informed representatives in Booth No. 30.

**Booth No. 31—LEDERLE LABORATORIES, INC.**

Lederle Laboratories, Inc. will be found in Booth No. 31, where they will feature Pollen Antigens, Solution Liver Extract (showing the new U. S. P.-Council Accepted unit packages) and the latest Pneumonia Serum of which Types III, IV, V, VI, VII, VIII and XIV are now available, in addition to Types I and II. The booth will be in charge of Mr. O. W. Lee.

**Booth No. 32—QUINTON-DUFFENS OPTICAL COMPANY**

Two new mountings, the Wils-Edge and the Cushion-Lock, will be featured in this display, which will also include a complete line of lenses and accessories.

**Booth No. 33—PETROLAGAR LABORATORIES**

Petrolagar is an emulsion of pure mineral oil (65% by volume) and agar-agar, accepted by the Council on Pharmacy and Chemistry of the American Medical Association for the specialized treatment of constipation. Scientific drawings and literature on the subject of constipation will be available in addition to display of the five types of Petrolagar.

**Booth No. 34—MIDWEST AIRTEMP CORPORATION**

Chrysler Air-Temp airconditioning apparatus will be shown and explained by this Wichita concern.

**Booth No. 36—LEICA CAMERA COMPANY**

A demonstration of Leica cameras and accessories.

**Booth No. 37—DENVER CHEMICAL MANUFACTURING COMPANY**

In Booth No. 37, Antiphlogistine will be exhibited. Also exhibited for the first time will be Galatest, a new micro-reagent for the instantaneous detection of urine sugar.

**Booth No. 39—Mc INTOSH ELECTRICAL CORPORATION**

The McIntosh Electrical Corporation offers a complete line of up to date physiotherapy equipment. Inquire about the value of low voltage. Be sure to see the portable x-ray.

## ROUND TABLE LUNCHEONS

Round Table Luncheons for discussion of sectional topics will be held each day during the meeting. The scientific speakers will be guests at the luncheons in order that members may ask questions and discuss any subjects in which they are interested. There will be no discussion at the General Sessions and the luncheons have been provided to fill this need. The Sections on Surgery and Medicine will be held at the Allis Hotel and the Section on Eye, Ear, Nose and Throat will be at the Lassen Hotel, and will convene at 12:15 p. m., Tuesday, Wednesday and Thursday.

Tickets for these luncheons will be on sale daily at the Registration Desk. Members are urged to attend and to buy their tickets in advance.



## CALLING ALL GOLFERS & SHOOTERS

Hear ye and know ye, that on Monday, May 9, 1938, The Kansas Medical Golfing Association, is called for assembly in Wichita, Kansas, for the purpose of maintaining the traditions of that order, for the purpose of playing golf, for the purpose of getting better acquainted, for the purpose of ascertaining something about what went on last year and for the purpose of choosing officers for the coming year or years.

This call is sent out officially by the Secretary of this noble order and includes all skeet and trap shooters, as the two groups have become close brothers not only in golf and gun shooting, but in those joys and revelries usually realized following the completion of a hard days work. There is no "Playground" in America which exceeds in joy and exuberance the annual golf and skeet shoot of The Kansas Medical Society and those of you who have previously attended one of these affairs need no invitation. It is to the other members of the Medical Society, those unfortunates who have never attended one of these "affairs" that this message is particularly addressed. Govern yourselves accordingly. Were you there last year?

Lerton V. Dawson, M.D., Secretary



MEAD JOHNSON TROPHIES

## GOLF TOURNAMENT

The Golf Tournament will be held at the beautiful Crestview County Club, two and one-half miles east of Broadway on Twenty-first Street, where the facilities of both the course and the club house will be at the disposal of the physicians.

The course will be open for tournament play at 10 A. M. This has been done in order to make it possible for the large number who wish to play golf and shoot skeet to take

in both events, and also to take care of the unprecedented large attendance expected this year.

The competition will be such this year that the one who wins may well be proud of his achievement. However, there will be prizes for those who shoot the average physician's score and also for those who shoot above 110.

## SKREET TOURNAMENT

The skeet tournament will be held Monday, May 9, at the Wichita Gun Club, located three miles west of the city on the Cannonball Highway. Shooting grounds will be open for contestants at 9:00 a. m. and will not close until 5:00 or 6:00 p. m. Targets and shells may be purchased at the club and plenty of guns will be available for those men who do not bring their own. Sandwiches and cool drinks will be served at the club-house. The program includes the following events: 20 shots with a .22 pistol or revolver at 20 yards, 10 shots with a .22 rifle at 50 yards, prone, and 10 shots at 50 yards, standing-free rifle position, telescope or iron sights; 100 trap targets for the experienced shooter, 100 skeet targets and 12 pairs of doubles; for the inexperienced shooter there will be 50 targets at traps, 50 targets at skeet, the same program for rifle and pistol shooting as above; there will be a four-man team race at both traps and skeet (the men composing any one team must be from the same county society), a two-man team race at skeet and at traps (those composing any one team must be from the same town).

There are more than thirty trophies for this shooting program which will be equally divided on 100 trap targets, 100 skeet targets and 12 pairs of doubles for the experienced shooters and 50 trap targets and 50 skeet targets for the men who have never fired trap or skeet before. There will also be trophies for the experienced and inexperienced rifle and revolver shots. Trophies given to the new shooters on trap and skeet are exactly the same as those to be given to the experienced shooters.

Trophies include gold and silver plated loving cups (ten in number); shooting statutes on attractive walnut bases (rifle, skeet, revolver and trap shooters); medals for team races and a number of merchandise prizes.

The Trap and Skeet Shooting Committee, headed by Dr. L. A. Sutter, especially urges all members of the Society who have never attended these meets in the past to be on hand.

## TOURNAMENT TROPHIES

The following is an incomplete list of firms who have been kind enough to donate trophies and prizes for the golf and skeet tournaments.

### MEAD JOHNSON & COMPANY

*Handicap Trophies for both golf and trap (see illustration), to be awarded permanently for three victories.*

### QUINTON-DUFFINS OPTICAL COMPANY

*Golf Championship trophy—(see illustration)—to be awarded permanently this year.*

### AMERICAN OPTICAL COMPANY

*Two pair of Polaroid sunglasses*

### ARCHER-TAYLOR LABORATORIES

*A gift.*





QUINTON-  
DUFFINS  
TROPHY

A. S. ALOE COMPANY

*One leather physician's bag.*

BURROUGHS WELLCOME & COMPANY

*One no. 40 hypodermic case.*

DE VILBISS COMPANY

*One No. 18 atomizer.*

DUNLOP TIRE & RUBBER CORPORATION

*One dozen Maxfli Golf Balls.*

HORLICK'S MALTED MILK CORPORATION

*Two dozen flasks of Horlick's Malted Milk Lunch Tablets.*

MID-WEST SURGICAL SUPPLY COMPANY

*A gift.*

LUZIER'S INCORPORATED

*One gift package Luzier's cosmetics*

LEA & FEBIGER, PUBLISHERS

*One set of Romanis and Mitchener's "Science and Practice of Surgery"*

PARKE, DAVIS & COMPANY

*One glaseptic ampoule case.*

P. BLAKISTONS' SON & COMPANY

*One copy of Hughes' "Practice of Medicine".*

PETROLAGAR LABORATORIES

*One Rolls Razor*

PHILIP MORRIS & COMPANY

*Three cartons of Humidorpacs of Philip Morris cigarettes.*

RIGGS OPTICAL COMPANY

*One pair of Bausch and Lomb RayBan goggles.*

SHARP & DOHME, INCORPORATED

*Two aluminun hypodermic tablet cases.*

THE W. E. ISLE COMPANY

*One large framed picture.*

THE ZEMMER COMPANY

*One hand-made leather medicine case filled with pharmaceuticals.*

E. R. SQUIBB & SONS

*One Squibb "Book of Health"*

RUSSELL & COMPANY

*A gift.*

## STAG BANQUET

In the evening following the tournaments (Monday, May 9, at 6:30 p. m.) the annual Stag Banquet will be held at the Crestview Country Club. Trophies and prizes will be awarded at this time and an entertaining program will be provided.

All members of the Society, whether or not they take part in either of the sporting events of the day, are urged and invited to attend the banquet.

## THE BIRTH OF A BABY

Through the courtesy of Mead Johnson and Company, the members of the Society will be privileged to attend a preview showing of the motion picture, "The Birth of a Baby", at 5:15 p. m., Thursday, May 12, in the Arcadia Theater of the Forum, following the last General Session.

"The Birth of a Baby" is a full length picture, produced by a committee of five members of The American Committee on Maternal Welfare, for education of the public in this most important subject. Professional actors and direction were used, under the personal supervision of Dr. Fred L. Adair, Chairman of The American Committee on Maternal Welfare. The story is that of a mother from early pregnancy through birth of her child, and emphasis is placed throughout upon the importance of competent medical guidance for the safety of the prospective mother and the unborn child. Its one objective is to educate the public to the need for maternal care and the value of the physician's services. It is not in any respect intended for instruction to physicians, but should be of great interest and value to them.

Although intended for public showing, exhibition of this film is as ethical as its production, and it is shown to lay audiences only following approval of the state and local county medical societies. Every detail of such a showing is carefully controlled. The film advertises no thing, person, or film. The exhibitor cannot allow any sex or advertising program to be shown with "The Birth of a Baby". Only approved lobby photographs, signs, newspaper stories, etc., of a dignified nature may be used.

The film was first presented to physicians who attended the Atlantic City meeting of the American Medical Association, June 10, 1937. Since that time it has been shown to many state and county medical societies and lay audiences. It has received much praise and approval from the profession, has been widely commented upon in the lay press, and will undoubtedly be of interest to every member of the Society.

## EYE, EAR, NOSE AND THROAT

The Section on Eye, Ear, Nose and Throat will meet daily both morning and afternoon throughout the meeting on the balcony of the Rose Room of the Forum. For details see program on page 139 of this issue.



*Schedule of Events for*

## VISITING WOMEN

## 79TH ANNUAL SESSION

*Wichita--May 10, 11, 12***TUESDAY MAY 10**

## REGISTRATION—WICHITA FORUM

231 South Water

10:00 A. M. TOUR CUDAHY PACKING PLANT

Start from Forum at 9:45 a. m.

12:30 P. M. LUNCHEON

Courtesy Cudahy Company

2:00 P. M. CITY DRIVE

3:00 P. M. MEETING BOARD OF DIRECTORS

KANSAS MEDICAL AUXILIARY

(Thirteenth Annual Session)

*Lassen Hotel***WEDNESDAY MAY 11**

## REGISTRATION—WICHITA FORUM

10:00 A. M. MEETING DELEGATES

KANSAS MEDICAL AUXILIARY

*Lassen Hotel*

1:00 P. M. LUNCHEON

*Spanish Ballroom, Lassen Hotel*

(Tickets \$1.00)

Round Table Discussion—Presidents County Auxiliaries

Mrs. E. K. Lawrence

Mrs. C. D. Kosar

Mrs. L. A. Proctor

Mrs. D. A. Anderson

Mrs. B. P. Smith

Mrs. W. Y. Herrick

Mrs. F. L. Dennis

Mrs. C. V. Black

Mrs. Wilfred Cox

Mrs. C. Omer West

Mrs. R. W. Urie, Auxiliary President, presiding

7:00 P. M. ANNUAL BANQUET &amp; DANCE

*Innes Tea Room***THURSDAY MAY 12**

## REGISTRATION—WICHITA FORUM

2:00 P. M. TEA

*Wichita Country Club*

Vocal Selections—Mrs. Carl Johnson

Costumed Monologues—Ruth McCormick

## PRESIDENT'S MESSAGE

I wish to extend to each and every member and also to those of you who may not be members an invitation to attend the annual meeting of the Women's Auxiliary to The Kansas Medical Society in Wichita, May 9, 10, 11 and 12.

With Mrs. D. W. Basham as chairman, the ladies of Sedgwick County are upholding their reputation for unusual entertainment. This is the big event of the year and we want you there to help us enjoy it.

Mrs. R. W. Urie, President

## PRESIDENT ELECT'S MESSAGE

"Looking into the Future" we see a wonderful fellowship and very dear friends among the doctors' wives.

Kansas medical societies will each have their auxiliary and the doctors' wives will all have had an invitation to be auxiliary members.

Programs that will lead to harmony and understanding in each auxiliary will be a source of help and appreciation by the medical societies.

A warm welcome has always awaited all doctors' wives at the state convention and how large the auxiliary has become! We cannot conscientiously rest until every prospective member is enrolled.

How welcome a visiting doctors' wife is to a county auxiliary meeting in another county and best of all, she has previously met most of the ladies there and they are old friends.

"Looking into the Future" we are not putting on rose colored glasses. We will not need them.

As I sit at my desk and look out over the newly sprouted wheat fields and the beautiful rolling country on this November day, "Looking into the Future" is very promising for the Kansas Auxiliary.

Mrs. Frank Coffey, President Elect.

### SEDGWICK COUNTY COMMITTEES

General Arrangements—Mrs. D. W. Basham

Entertainment—Mrs. J. W. Cheney, Chm.

Mrs. E. M. Seydell	Mrs. H. F. Hyndman	Mrs. J. E. Chipps
Mrs. J. S. Reifsneider	Mrs. Geo. Milbank	Mrs. L. A. Sutter
Mrs. Geo. Gsell	Mrs. H. E. Friesen	Mrs. F. L. Menehan
Mrs. Martin Hagan	Mrs. A. L. Crittenden	Mrs. E. S. Edgerton
Mrs. E. C. Rainey	Mrs. Bruce Meeker	Mrs. Allen Olson

Greeters—Mrs. H. N. Tihen, Chm.

Mrs. Hervey Hodson	Mrs. L. A. O'Donnell	Mrs. G. A. Spray
Mrs. G. W. Kirby	Mrs. J. S. Hibbard	Mrs. L. P. Warren
Mrs. C. R. Burkhead	Mrs. C. T. Hinshaw	Mrs. E. D. Ebright
Mrs. E. E. Tippin	Mrs. W. J. Kiser	

Transportation—Mrs. Charles Rombold, Chm.

Mrs. C. H. Warfield	Mrs. V. L. Pauley	Mrs. F. J. McEwen
Mrs. A. E. Bence	Mrs. N. C. Nash	Mrs. H. O. Anderson

Registration—Mrs. A. P. Gearhart, Chm.

Mrs. E. M. Palmer

Favors—Mrs. O. C. McCandless, Chm.

Mrs. V. L. Scott	Mrs. H. O. Anderson	Mrs. J. V. VanCleve
Mrs. A. F. Rossitto	Mrs. W. J. Eilerts	Mrs. R. G. House
		Mrs. E. L. Cooper

Tickets—Mrs. Wilfred Cox

Publicity—Mrs. Frank Emery, Chm.

Mrs. Willard Kiser

Decorations—Mrs. Hal Marshall, Chm.

Mrs. Ralph Drake	Mrs. Geo. Cowles	Mrs. N. L. Rainey
Mrs. J. E. Wolfe	Mrs. M. O. Nyberg	Mrs. A. E. Gardner
Mrs. A. E. Hiebert	Mrs. E. D. Carter	Mrs. C. C. Brown
		Mrs. E. H. Terrill
		Mrs. M. R. Blacker

Exhibits—Mrs. E. J. Nodurft, Chm.

Mrs. F. C. Beelman	Mrs. W. J. Bierman	Mrs. L. B. Putnam
Mrs. Earl Clark	Mrs. B. C. Beal	



## PRESIDENT'S PAGE

As this is the last time I will have the privilege to appear on this page I wish to take the opportunity to express my sincere appreciation and thanks for having been honored to serve as president of The Kansas Medical Society during the past year. While the duties of state president are becoming more exacting and the past year has been rather strenuous, still it has been one of the happiest years in my more than four decades in the field of medicine. This is due largely to the kindly and efficient cooperation given by every member who was asked to do something. Especially do I wish to express my appreciation to every member of the Sedgwick County Medical Society for their loyal and friendly support and helpful cooperation.

I do not know of a single sore spot in the state as far as state organization is concerned. To me this is marvelous. As long as we continue to work and pull together, supporting our executive officers in their activities, Kansas medicine will become increasingly important in the general welfare activities of the state.

I will have something to say about the activities of our versatile executive secretary and his staff, and also references to the work done by the chairmen of the various committees in my official address, so here I say only—thank you.

In turning the mace of authority over to our next president, my successor, Dr. N. E. Melencamp, we know that it rests in capable hands. Dr. Melencamp was serving as councilor for his district when elected to his present office. Experience in the council chamber is fine training for the duties he will assume. Dr. Melencamp is a representative of the younger virile element of our Society and will bring to this office the enthusiasm and energy that will continue to place Kansas medicine on an increasingly higher plane. I can say nothing better for Dr. Melencamp than that I know each of you will give him the same loyal support which you have given to me.

It is with a twinge of regret that I say—adieu.

J. F. Gsell, M.D., President.

---



---

## EDITORIAL

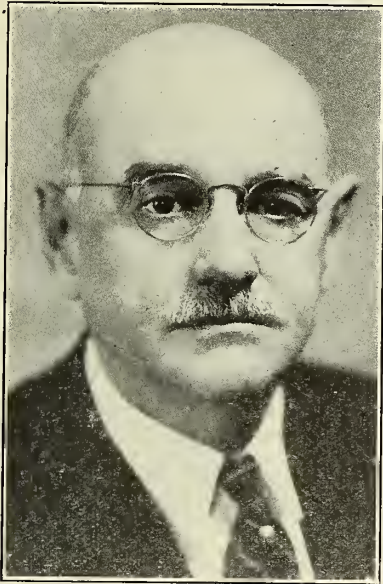
---



---

### THE RETIRING PRESIDENT

Dr. J. F. Gsell may justifiably take pride in the many accomplishments he provided for the Society during his year as President. His year was not an easy one and instead was filled with many problems, both state and national, of great importance to the public and the medical profession. The fact that he was able to outline a course of action for the Kansas profession which aided in the solution of these problems is self-indicative of the good judgment and proficiency he displayed.



J. F. GSELL, M.D.

His code throughout the year was that doctors can and will solve their own problems and he attempted successfully to instill this spirit in every committee, every county medical society and every physician in the state. As a result of this, the Society made great progress in cooperating with state and local groups interested in public health and medical service.

Of great interest in this direction was the work of the Society with the Kansas State Board of Social Welfare. Through request made by the Society, that Board appointed a Committee on Indigent Medical Care composed of representatives of county commis-

sioners, county welfare directors and the medical profession, which held several meetings for the purpose of discussing ways and means wherein the handling of indigent medical care might be improved. As a result of these deliberations, an official recommendation was made to the various counties that each should adopt a lump sum or fee schedule plan operated through assistance of its county medical society. The some committee also recommended that each county should appoint a liason committee composed of representatives of its county medical society to advise with the county commissioners in the conduct of local public health and medical problems. The Kansas State Board of Social Welfare under authority of the Social Security Act also decided to institute a medical treatment program for Kansas blind persons. It sought the counsel of the Society in this important function and a program was prepared which has received praise from other state and national agencies for its scientific efficiency.

The Board of Administration and the Kansas State Board of Health were assisted extensively in the conduct of their work relating to state institutions and public health respectively and the Kansas profession takes pride in the fact that it was able to assist these important agencies in many ways.

The advent of the Sales Tax occasioned an interesting problem as to how Kansas physicians might be able to efficiently assume their obligation under this act. Through close cooperation with the Kansas Tax Commission, the problem was solved in a manner satisfactory to all. The profession has also taken pride in the fact that the Kansas Tax Commission has on numerous occasions complimented the Society for its efficient cooperation in this regard.

Similar examples might be cited of close cooperation with numerous official and unofficial state and local agencies. The Society has attempted in every way possible to offer its assistance to every worthwhile group interested in the improvement of public health for the people of Kansas, and almost without exception the assistance has been gladly accepted and efficiently rendered.

Another important event during the year was the furtherance of the Society's belief that Kansas laws pertaining to healing should be more rigidly en-



forced. Prosecutions were brought against a considerable number of practitioners who were conducting healing practices without any form of license and of foremost importance was the conclusion of litigation to define the rights of practice of Kansas osteopaths.

Another achievement was the furtherance of post graduate instruction for physicians. Courses on obstetrics, pediatrics, venereal diseases, tuberculosis and cancer were sponsored in close cooperation with official agencies. Programs were commenced in this direction which will be expanded in future years and which will prove of great benefit to the medical profession.

Continued progress was made with lay education and preventive medicine programs and Kansas was able to offer a considerable number of counties wherein no child or other person died from preventable disease.

Efforts were concluded wherein for the first time in the history of the state a full and complete merger was affected between the groups interested in the prevention and cure of tuberculosis. Kansas progress in this direction is now assured.

Dr. Gsell spent great care in the selection of his committees and the results of this were gratifying. Almost without exception, every committee met and attempted to further the program which it was assigned. New committees on Pharmacy, Allied Groups, and Conservation of Eyesight were appointed to study and provide assistance in these fields.

Many other accomplishments may be cited: The issuance of bulletins urging that each county medical society hold frequent and regular meetings, that they provide extensive work for their members on preventive medicine, cancer, heart disease and venereal disease, and that all members attend at least two intersectional post graduate meetings each year; conferences were authorized with labor and farm groups wherein mutual medical problems might be discussed; a beginning was made for the Society to provide a greater program in radio, newspaper, and public lecture health education; meetings were held with the Kansas University Endowment Association to discuss ways and means wherein the medical profession might assist that group in medical research; study was given as to whether Stormont Medical

Library and the University of Kansas School of Medicine Library should be consolidated; publication of scientific brochures on venereal disease and cancer for use by physicians was authorized; a survey was completed wherein for the first time a complete listing of Kansas hospitals and facilities was made available; arrangements were made wherein the Kansas State Hospital Association will this year and in future years combine its state meeting with the Society annual session; consideration was given to the possibility of adding a hospital division to the central office; a survey was made of the number and kind of x-ray and pneumo-thorax equipment in the state; a recommendation on tuberculin testing; a survey was completed wherein the legislature may be given assistance in the construction and location of additional facilities for tuberculosis hospitalization; the Society merged its forces with the Kansas Society for Prevention of Blindness in the preparation and conduct of a conservation of eyesight program; a survey was made of the cause of blindness in Kansas; a series of pamphlets was issued on eyesight conservation for distribution in the public schools; a report was prepared pertaining to lay technicians; the Auxiliary was encouraged in conducting public health exhibits before state and county lay groups, in providing medical speakers for these groups, and in recommending to public libraries the purchase of a list of books on public health; courses on medical economics and art of medical practice were inaugurated at the University of Kansas School of Medicine and approximately twenty-five Kansas physicians presented talks on these subjects to senior students during the year; the Medical School was afforded assistance and guidance in numerous other ways; a series of councilor district meetings was sponsored wherein the profession might be acquainted with certain important legislative, business and economic problems; loan packets and movies on cancer and similar subjects were made available through the central office; and a study of improvement of Kansas quarantine laws and Kansas maternal and child welfare statistics was begun.

A review of the record for the past year will show that the Society acted wisely when it entrusted its leadership to Dr. Gsell. Those who worked with him know that the Society came first during his year, that he stood ready and willing to make any trip or

to take any action which would be helpful and that he gave the greater portion of his time in its interest. The Society salutes him for a job well done.

## THE NEW PRESIDENT

The Kansas Medical Society welcomes Dr. N. E. Melencamp of Dodge City as its seventy-sixth President.

Dr. Melencamp is not only a physician of recognized ability but he also has had a large amount of experience in the organization affairs of the Society. He was a member of the Executive Secretary



N. E. MELENCAMP, M.D.

Committee, which employed an executive secretary and instituted the present central office plan, and in addition to this he has served the organization as Councilor and in many other official capacities. His wide experience in Society work and his general capabilities equip him well to assume the responsibilities of this most important office and to continue the excellent record of his predecessors.

Dr. Melencamp was born in 1888. He received his medical education at the St. Louis University School of Medicine, from which he graduated in 1913. He served as house surgeon for the Atchison, Topeka & Santa Fe Railroad Hospital in Topeka from 1913 to 1915. He held the rank of Captain in the Army Medical Corps during the World War and

served thirteen months overseas as the commanding officer of the Fifth Division Ambulance Corps. During recent years he has been Chief Surgeon of the State Soldier's Home at Fort Dodge, Kansas.

In addition to membership in Kansas county and state medical organizations, he is a Fellow of the American Medical Association and a fellow of the American College of Surgeons.

Kansas medicine looks forward with great confidence to Dr. Melencamp's year as President and pledges him its utmost assistance.

## 79TH ANNUAL SESSION

Sedgwick County Medical Society is to be congratulated upon the excellent program which it has arranged for the 79th Annual Session of the Society.

The list of speakers includes some of the most able physicians in the country and the subjects cover a wide range of interest, both for the general practitioner and the specialist. Of especial interest is the attendance of the meeting by Dr. J. H. Upham, Columbus, Ohio, President of the American Medical Association, and his address on the "Economic Aspects of Medicine".

Another particularly interesting feature of the meeting will be the Hall of Health. This undoubtedly is the most extensive medical lay educational program ever attempted in this state and it is estimated that not less than fifty thousand people will view this exhibit. A suggestion is made that every member should urge all of his patients within driving distance of Wichita to attend this most unusual event.

The meeting place is large and conveniently arranged and both of these facts have made it possible to present the largest number of technical and scientific exhibits in the history of the Society.

The House of Delegates meetings will be devoted almost entirely to consideration of business problems of the Society inasmuch as the official reports have been printed in this issue of the Journal and as much time may be saved thereby in voting upon them by title and with oral description. Several questions of major importance to the Kansas medical profession will be presented for decision by the House of Delegates.



The Alumni Roundup Banquet, the Annual Banquet, the events for visiting women and other entertainment features of the meeting will equal the high standards established in past years. The Golf and Trap Tournaments will include more events than ever before and a larger list of prizes has been provided. The Round Table Luncheons are to be provided as a means for discussion of questions and are supplanting the usual discussion of papers in the various sections.

Another innovation this year is the fact the Kansas State Hospital Association will hold its annual session concurrently with the Society at the same meeting place on May 10 and 11. It is believed that this will afford the beginning toward a merger of the various organizations interested in public health and that each of these groups may receive assistance through this plan. The Kansas State Hospital Association has invited all Society members to attend their sessions who desire to do so.

Wichita is advantageously located as a meeting place; its hotel facilities are entirely adequate and all indications are that this will be the largest and most successful meeting the Society has ever held. If you have not already done so, plan now to be in Wichita from May 9 through May 12.

OFFICIAL PROCEEDINGS

FOREWORD TO DELEGATES

*Since the agenda of the House of Delegates has increased appreciably during recent years, an attempt has been made this year to save time necessary for reading of reports by publishing in advance as many of these as possible.*

*All of the following reports will be discussed and presented for adoption but since they will not be read all delegates are requested to become familiar with them in advance of the meeting.*

The following is the report of the Councilor of the First District:

TO: THE HOUSE OF DELEGATES

The several counties of the First District continue to be thoroughly organized with medical societies in every county. No serious problems have arisen during the year. On March 17, 1938, at Marysville, the Kansas State Board of

Health film on syphilis was shown to a large group of doctors, dentists, and pharmacists of Marshall County by Dr. F. P. Helm, Secretary of the Board. On March 24 and 25, 1938, a representative group of doctors met in Hiawatha for the post graduate course on Syphilis and Gonorrhea, given under the auspices of the Kansas State Board of Health and The Kansas Medical Society, and presented by Dr. Arthur D. Gray of Topeka. This post graduate course is a national set-up, and Kansas is the first state to give it. This meeting at Hiawatha was the first one held in Kansas, and also is the first meeting of its kind in the United States.

Organized medicine is functioning very efficiently in the First District.

Respectfully submitted  
R. T. Nichols, M.D., Councilor, First District.

The following is the report of the Councilor of the Second District:

TO: THE HOUSE OF DELEGATES

Your Councilor hereby submits his annual report of the Second District for the past year.

This district is composed of eight counties, viz:

Anderson, Douglas, Franklin, Johnson, Leavenworth, Linn, Miami and Wyandotte.

Questionnaires were sent to the secretaries of each of the county societies and their replies are chiefly the basis of this report.

TABLE I

This shows (A) the names of the secretaries, (B) the schedule for regular meetings, (C) the number of meetings held the past year, (D) the percentage of scheduled meetings held by each county society.

Name	A	B	C	D
Anderson County	Dr. Ralph E. White	Monthly	6	50%
Douglas "	Dr. J. M. Mott	"	12	100%
Franklin "	Dr. Geo. W. Davis	"	15	125%
Johnson "	Dr. Frank Tolle	"	8	66 2/3%
Leavenworth "	Dr. W. L. Pratt	Semimonthly	21	87%
Linn "	Dr. H. L. Clarke	Bimonthly	5	83 1/3%
Miami "	Dr. P. F. Gatley	Monthly	6	50%
Wyandotte "	Dr. D. N. Medearis	Bimonthly	12	50%

The percentage of meetings held is not accurate because many of the societies do not contemplate meetings during the hot summer months. The number of meetings held during the year more accurately reflects the activities of the different societies. Leavenworth County held the most meetings, Franklin County second, while Douglas and Wyandotte tied for third. Linn County held the least number of meetings.

TABLE 2

This table shows (A) the number of members in each society, (B) the average attendance at the meetings and (C) the percentage of members attending.

County	A	B	D
Anderson	11	7	63.6%
Douglas	35	17	44.6%
Franklin	18	36	200. %
Johnson	22	8	36.4%
Leavenworth	23	12	52.2%
Linn	9	5	55.5%
Miami	18	6	33.3%
Wyandotte	118	33	19.4%

Which reveals that Franklin County is the only society in the district which had an average attendance of more than its total membership.

The average attendance at the meetings reflects very

# The Allis

## A Friendly Hotel

*Headquarters For  
The Medical Profession*



Sedgwick County Medical  
Society Dinners

First and Third Tuesday



Wichita, Kansas



To the Kansas Medical Society

*Greetings!*

You are cordially invited to visit our  
hospital while in Wichita.

**WESLEY HOSPITAL**

WICHITA, KANSAS



# OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request

**OAKWOOD SANITARIUM**  
Tulsa, Oklahoma, Route 6

NED R. SMITH, M.D.  
Medical Director

S. CHARLTON SHEPARD, M.D.  
Attending Internist

T. N. NEESE  
Business Manager

DAISY N. NEESE  
Superintendent



much the interest in the programs.

Wyandotte County the largest society in the district had the lowest percentage of attendance. They had excellent programs but the attendance was very poor. This is partially explained by the fact that there are so many other medical meetings being held in the city besides those of the county society. There are four hospitals in Kansas City, Kansas, each of which holds a regular monthly staff meeting and all of the members of the county society are on the staffs of two or more, some being on all four.

There are also many other medical meetings such as those of the clinical society, the Academy of Medicine, the various specialists societies and many sectional, district and national organizations. These all detract from the attendance at the county society. However, when one observes those who attend these meetings they are usually the same individuals who attend the county societies. This further reflects that there are a greater number of parasites, so to speak, who can better hide in the congested areas who want to take most and give least. They are usually the ones who kick hardest and complain most because the medical society does not do more for them.

TABLE 3

This table shows (A) the interest manifested in each of the societies compared with the previous year and (B) the comparison of attendance with that of the previous year.

Name	County	A	B
Anderson	"	Same	Same
Leavenworth	"	"	"
Johnson	"	"	"
Franklin	"	More	Better
Wyandotte	"	Same	Same
Douglas	"	"	"
Linn	"	More	Better
Miami	"	Same	Same

Which shows that the interest manifested is at a standstill, which may be good, bad or mediocre, in six of the counties while that of Linn and Franklin Counties has been more stimulated.

TABLE 4

This table shows (A) the paid up membership of each society reported April 5, 1938, (B) reported the same last year and (C) increase or decrease in membership.

Name	County	A	B	C
Anderson	"	11	12	1
Leavenworth	"	23	23	0
Johnson	"	22	23	1
Franklin	"	18	19	1 died
Wyandotte	"	118	114 plus	4
Douglas	"	35	36	1 died
Linn	"	9	9	0
Miami	"	18	18	0

This shows at the time of making this report that this district has exactly the same number (254) of paid up membership as last year at the same time.

Franklin, Douglas, Anderson and Johnson County each lost one member, while Wyandotte collected four more than at the same time last year.

TABLE 5

This table shows (A) the number of members in each county society (B) the number of M.D.s., registered in each county and (C) the number registered in each county who are not members of their county society.

Name	County	A	B	C
Anderson	"	11	13	2
Douglas	"	35	43	8
Franklin	"	18	27	9
Johnson	"	22	24	2
Leavenworth	"	23	32	9
Miami	"	18	24	6
Linn	"	9	11	2
Wyandotte	"	118	150	32
TOTAL		254	324	70

Which shows that only eighty per cent of the M.D.'s., registered in the Second Councilor District are members of the Kansas Medical Society.

Of the twenty per cent who are not members some are ineligible. Others are colored, who maintain their own state society, many of whom have not contact with The Kansas Medical Society. These doctors need The Kansas Medical Society and The Kansas Medical Society needs them. Some method should be worked out satisfactory to both, whereby the eligible colored doctors may become members and participate in the scientific and business affairs of the society.

The secretaries of the eight county societies report fifteen of the seventy are eligible for membership in their societies. These fifteen should be made to realize that we need them but that they need us more. Each society has been notified by the Councilor, that he and all of the officers of the state Society will be glad to help in every way possible to show them the light. They will call on each of these personally if informed it is advisable.

At this time the Councilor wishes to express his appreciation to all of the secretaries for their promptness and completeness in making their reports and to all of the officers and members who have worked so loyally. He also desires to acknowledge his gratitude for the privilege of serving them the past two terms.

Respectfully submitted,

L. F. Barney, M. D.  
Councilor, Second District.

The following is the report of the Councilor of the Third District:

#### TO: THE HOUSE OF DELEGATES

There have been no complaints from our District and while we are not up to 100 per cent by a long way in our membership, I have nothing to report except that everything has gone smoothly in our district.

Respectfully submitted

L. D. Johnson, M.D., Councilor, Third District.

The following is the report of the Councilor of the Fourth District:

#### TO: THE HOUSE OF DELEGATES

The district consists of the following counties, Shawnee, Lyon, Wabaunsee, Osage, Coffey, Morris and Chase counties. Shawnee, Lyon and Wabaunsee counties have very active societies and have regular monthly meetings. Osage county is one of the young societies and rather small but fulfills the demands and needs of organized medicine in the county. Coffey County is even smaller but has regular quarterly meetings and considering their size, is doing a good piece of work. Each society is organized for the purposes of lay education, scientific needs and for legislative purposes. Unorganized counties have contact physicians and these men call together, from time to time, the other physicians in their respective counties for discussion of the problems that confront their individual counties, however they carry their membership in other societies of the district.

Respectfully submitted

J. L. Lattimore, M.D., Councilor, Fourth District.

# Best Wishes for a Successful 1938 Meeting of The Kansas Medical Society

We will be with you at Wichita—May 9-12, 1938



## VISIT THE ZEMMER BOOTH NO. 11

Our exhibit will be in charge of our representative,  
Mr. W. H. Alexander

"Chemists to the Medical Profession" KA 5-38

THE ZEMMER COMPANY, Oakland Station, PITTSBURGH, PA.

# RADIUM

## —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

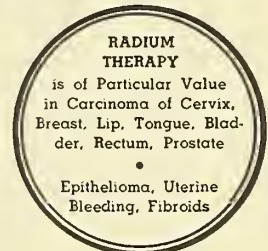
*The complete service for Radium users*

*For details, address*

## RADIUM AND RADON CORPORATION

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO



# WOODCROFT HOSPITAL



## PUEBLO, COLORADO

Founded 1896 by Dr. Hubert Work

A modern, newly constructed sanitarium for the scientific care and treatment of those nervously and mentally ill, the senile and drug addicts.

CRUM EPLER, M.D.  
Superintendent



The following is the report of the Councilor of the Fifth District:

TO: THE HOUSE OF DELEGATES

Your Councilor from the Fifth District begs leave to report that organized medicine is running a smooth course in this district.

Your Councilor has visited the meetings of most of the societies in the district during this year, and finds all the societies strong and active, with a condition of peace and harmony prevailing among the members of the profession.

Respectfully submitted

M. Trueheart, M.D., Councilor Fifth District.

The following is the report of the Councilor of the Sixth District:

TO: THE HOUSE OF DELEGATES

The Sixth District has been a very active district in the past year. We have had a great many meetings and everything has run along very smoothly. The physicians of this district are very much interested in their local society and are particularly gratified in the operation of our Society.

We have nothing of particular interest to report. We sincerely hope that all the physicians in Kansas, as well as those in this district, will find time to attend the Society Meeting here in May.

Respectfully submitted,

William P. Callahan, M.D., Councilor, Sixth District.

The following is the report of the Councilor of the Seventh District:

TO: THE HOUSE OF DELEGATES

The Mitchell County Medical Society reports an active year with meetings each month in conjunction with the staff meetings of the community hospital.

Jewell County Medical Society reports that they have not enjoyed a very active year. No set time or date is designated for meetings but they are called. They report a seventy-five per cent membership.

Riley County Medical Society reports an active year with regular meetings but no note is made of outside activities. They report nineteen active members with three men in the county who are eligible but are not at the present time active.

Washington County Medical Society reports a very active year. They report only one man in their county who is not a member of the society. Regular meetings were held every month during the year. They are working on a plan to bring medical subjects before the lay groups in their county and are presenting cancer, tuberculosis, venereal, and maternity problems. In 1937 they immunized 1,538 children against diphtheria. They sponsored a "get-together" program with the dentists which led to a reorganization and awakened activity of the dental society.

Republic County Medical Society reports a very active and successful year. They have for the first time an agreeable working contract with the board of county commissioners for the care of the indigent. They furnish their own speakers for their programs and usually wind up with a lunch. Regular meetings have been held each month.

Cloud County Medical Society reports a very active year. Only three business meetings were held during the year. An orthopedic clinic was held last May under the auspices of the Kansas Crippled Childrens' Commission. 593 children were immunized against diphtheria in a clean-up campaign. The society entertained at a meeting of the councilor district which was under the direction of the Medical Economics Committee. They report only one man in the county who is not an active member of the society.

Clay County Medical Society reports an active year with meetings held each month. Speakers are usually obtained from out of town. The society sponsored a program of tuberculin testing all the school children. Recently they sponsored a skin clinic which was well attended. Plans are completed for immunization of all children from one to ten years against diphtheria this fall as this work was last done in 1934. Plans are also complete for tuberculin testing all school children who have not previously been tested this fall and this will be followed by a tuberculosis clinic. The society reports a hundred per cent paid membership.

Respectfully submitted

F. R. Croson, M.D., Councilor, Seventh District.

The following is the report of the Councilor of the Ninth District:

TO: THE HOUSE OF DELEGATES

Number of meetings held: Three. Norton, Colby, Hoxie. Paid up members 35—in arrears 5. New members—none. Number of new men in territory three. Dr. Otis True, Bird City, Dr. C. M. Nelson, Oberlin, Dr. J. Pettit, Goodland.

Moved out of territory, Dr. B. S. Morris, Quinter, Dr. Philipp Cohn, Norton, Dr. E. J. Beckner, Goodland, Dr. Kierman, Norton.

The report is short but I have tried to cover the most important points.

Respectfully submitted,

W. Stephenson, M.D., Councilor, Ninth District.

The following is the report of the Councilor of the Tenth District:

TO: THE HOUSE OF DELEGATES

Herewith wish to report in brief the activities pertaining to the Tenth District.

Our effort in the Tenth District has been to maintain and increase our Society memberships, and at present there is being carried on a survey to ascertain any non-member practitioners in the district.

This survey is not as yet complete and final figures cannot be given as to the totals in this survey.

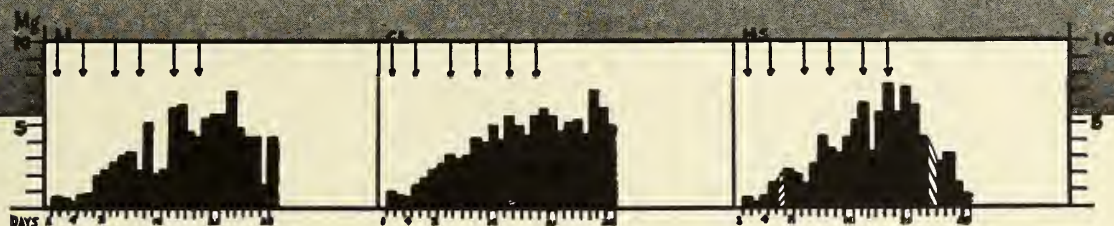
The Central Kansas Medical Society reports for the year a loss of two members for non-payment of dues. It is hoped however that these two have sought memberships in some other affiliated society meeting more conveniently for their attendance.

The Central Kansas Society also reports a gain of three new members the past year.

By personal contact in every way possible we have endeavored to obtain uniform regulation in handling the indigent and semi-indigent patients in the various counties in the district.

# Iodobismitol

## INDUCES AND MAINTAINS A THERAPEUTIC LEVEL OF BISMUTH IN THE BLOOD STREAM



Urinary excretion of bismuth after multiple injections of Iodobismitol. Arrows indicate injections

IN A RECENT CLINICAL STUDY,<sup>1</sup> patients were given 2-cc. doses of Iodobismitol twice weekly for a period of three weeks. The charts illustrated above show the urinary excretion of bismuth over a period of four weeks—49 per cent of the bismuth having been excreted. This would serve to "indicate that Iodobismitol is capable of developing a potent bismuth level in the blood stream. . . ."

This effect seems highly desirable for, according to the Council on Pharmacy and Chemistry, "Probably those compounds of bismuth will have the best antispasmodic value that are able to keep the therapeutic level of bismuth in the blood stream at such a continuous height that it will be re-

flected in the urine with a level of 0.003 Gm. or more of metallic bismuth per day."

Iodobismitol may be used alone or with the arsenicals. It is well tolerated in both early and late syphilis. Iodobismitol is almost completely absorbed, exerts a relatively prolonged effect at a high level, and a very high efficiency with respect to therapeutic utilization of the dosage given.

Iodobismitol with Saligenin is a propylene glycol solution containing 6% sodium iodobismuthite, 12% sodium iodide, and 4% saligenin (a local anesthetic). It presents bismuth largely in anionic (electro-negative) form.

<sup>1</sup> Sollmann, T., Cole, H. N., Henderson, K., et al.: *Amer. J. Syph. Gon. & Ven. Dis.* 21:480 (Sept.), 1937.

### SQUIBB ARSENICALS

Neoarsphenamine Squibb, Arsphenamine Squibb, and Sulpharsphenamine Squibb are prepared to produce maximum therapeutic benefit. They are subjected to exacting controls to assure a high margin of safety, uniform strength, ready solubility, and high spirocheticidal activity.

For literature write to Professional Service Dept., 745 Fifth Avenue, New York

**E·R·SQUIBB & SONS, NEW YORK**  
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.



This we feel has been quite worth while and in a way the efforts have met with quite encouraging success, as in the beginning there was no semblance of uniformity in handling this type of case.

Personally have responded to the request for a cancer talk in Goodland, through the chairman of your cancer committee.

The meeting was well attended and the reaction was that the people in general are responsive and are anxious to be informed concerning matters pertaining to health.

By request of the division of the Womens Field Army representatives in Hays, supplied them with a speaker preceding the showing of the cancer film in March Of Time.

There are several communities in this district that have been seeking to interest qualified men in locating for the practice of their profession.

Have personally tried to interest several young men in these various locations needing medical service, but with little success.

The Post Graduate Meeting held in this District on venereal diseases as sponsored by the State Board of Health and the Society was well received and many very complimentary remarks as to its value were expressed by those in attendance.

By personal letter to each of the counties in the Tenth District have endeavored to interest the physicians in the tuberculosis meeting to be held in Russell, April 22.

Respectfully submitted,

C. D. Blake, M.D., Councilor, Tenth District.

The following is the report of the Councilor of the Eleventh District:

#### TO: THE HOUSE OF DELEGATES

The Councilor of the Eleventh District takes great pleasure in presenting to you this report of the activities of the component societies.

Two new societies have been formed in the past year. The charter of the Barber County society was passed at the January meeting of the Council. The application of Kiowa county will be presented to the Council in May.

A great deal of interest and enthusiasm has been shown by all the societies in the legislative and economic programs. During the past year the people and legislators are learning, many for the first time, there is such a thing as a medical society.

Respectfully submitted,

A. C. Armitage, M.D., Councilor, Eleventh District.

The following is the report of the Councilor of the Twelfth District:

#### TO: THE HOUSE OF DELEGATES

As requested, I am submitting my report of medical affairs in the Twelfth District during the past year.

With a few exceptions the doctors of this district hold membership in one of its three active societies: The Ford County, the Finney County and the Meade-Seward.

Medical affairs in this district during the past year have been tranquil. One damage suit was instituted against two members of the state Society who reside just beyond the state line. This suit brought to attention the fact that the

insurance service of The Kansas Medical Society applies only to Kansas residents.

A fine feeling of fellowship exists among the doctors of this district. While all have felt the cut from the results of the drought of recent years service has been rendered apparently uncomplainingly. This attitude we hope has been detected by those served.

Respectfully submitted

G. O. Speirs, M.D., Councilor, Twelfth District.

The following is the report of the Committee on Control of Tuberculosis:

#### TO: THE HOUSE OF DELEGATES

Tuberculosis is one of a few medical conditions in which there is a well developed lay and public interest, and this necessitates active participation by the medical profession in order to give sound medical leadership to tuberculosis programs.

The official actions of the committee this year have been too extensive for any detailed report here, but have been published in the Tuberculosis section of the Journal from time to time and the Society is referred to these reports for details.

The Committee on Control of Tuberculosis is constituted so as to represent the medical profession, the Norton Sanatorium, the Tuberculosis Department of the Kansas State Board of Health, and the Kansas Tuberculosis and Health Association. Following is a brief summary of the work of the Committee during the year:

1. There has been a sincere attempt in the committee to bring about a better understanding and a better cooperation between these four major organizations, all of which have a definite place in the tuberculosis work in the State.
2. Several educational programs have been developed as follows:
  - (a). A course of lectures financed by the State Board of Health for the profession in various parts of the State.
  - (b). Arrangements for instruction in pneumothorax therapy at the Norton Sanatorium for any member of the Society who wishes to learn this procedure.
  - (c). A week of post-graduate professional and lay education financed by the Kansas Tuberculosis and Health Association.
3. Through bulletins an attempt has been made to awaken interest in each county medical society and thereby develop medical leadership of tuberculosis programs.
4. A written standardization for tuberculin testing programs has been developed.
5. Resolutions in regard to the manner of conducting tuberculosis clinics were adopted, which tend to foster leadership by the county medical societies.
6. Studies are being made in regard to the necessary sanatorium facilities in the State.

As stated above, interest in tuberculosis is widespread among the lay public, and this entails active work by the county medical societies in cooperation with the other tuberculosis agencies to maintain medical leadership and to develop the soundest policies in the field of tuberculosis. This cannot be accomplished by a negative attitude.

Respectfully submitted

Henry N. Tihen, M.D., Chairman, Committee on Control of Tuberculosis.

## Greetings

To The Kansas Medical Society from the  
Sisters of St. Joseph

WICHITA HOSPITAL

16,000

ethical



Since 1902

## practitioners

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

**\$1,500,000 Assets**

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited  
with the State of Nebraska**

for the protection of our members  
residing in every State in the U.S.A.



Since 1912

**PHYSICIANS CASUALTY  
ASSOCIATION**

**PHYSICIANS HEALTH  
ASSOCIATION**

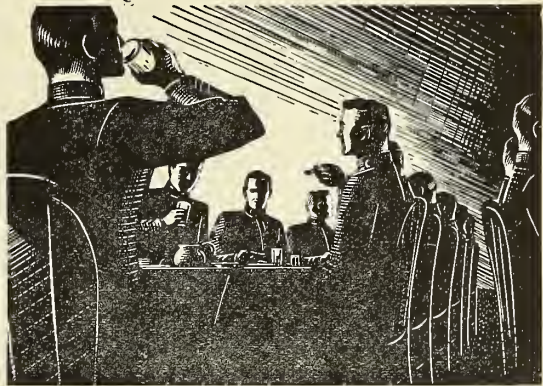
400 First National Bank Building  
OMAHA - - - NEBRASKA

CONGRATULATIONS

to our

STATE ASSOCIATION  
ON ITS 79TH ANNUAL MEETING

The  
Archer Prescription Shop  
and the  
Archer-Taylor Laboratories



## DIET

When the impulse to defecate is lessened due to improper diet or lack of discipline, the fecal matter usually becomes dehydrated and impacted in the bowel . . . To simplify the problem of bowel regularity, Petrolagar may be prescribed to advantage, as it assists in the regulation of bowel movement. Petrolagar mixes intimately with the bulk of the stool to induce a soft, easily passed mass. By reason of its pleasant taste and mild but thorough action, Petrolagar is agreeable to patients of all ages. Five types of Petrolagar provide a choice of laxative medication suitable for the individual patient. Petrolagar Laboratories, Inc., 8134 McCormick Blvd., Chicago, Ill.

*Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.*





The following is the report of the Committee on Conservation of Eyesight:

TO: THE HOUSE OF DELEGATES

As chairman of the Committee on Conservation of Eyesight of The Kansas Medical Society, it is my pleasure to submit the following report for the year 1937-38:

Since this is a new committee we have given a good deal of consideration to matters of policy, program and groundwork for future activities. We have had several committee meetings, including one with Dr. Harry Gradle of Chicago, chairman of the Committee on Conservation of Eyesight of the Illinois Society. Dr. Gradle and his committee, we felt, had probably had as much experience in this field as any one and we gained a great deal from his advice and counsel. We have also had a meeting with Dr. Lewis H. Carris, Secretary of the National Society for the Prevention of Blindness, whose counsel and advice was also very valuable and who made a number of public appearances thruout the state, both in person and by radio talks.

We attended the meeting of the State Supervising Ophthalmologists in Chicago, which was valuable from the standpoint of the different problems presented in the different states. We have also met with Major E. R. Rice, consultant on blindness to the National Social Security Board in Washington, and to the Committee of General Activities of the Council of the American Academy of Ophthalmology and Otolaryngology.

By invitation of the Board of Administration and the Superintendent, arrangements have been made for a sub-committee to visit the Kansas School for the Blind, Kansas City, Kansas.

We have from the first worked in closest harmony with the State Supervising Ophthalmologist and the lay agencies, chiefly represented by the Kansas Society for the Prevention of Blindness and the Kansas Association for the Blind. A number of special meetings have been held with the officers of these lay agencies.

A number of bulletins have been issued to the county medical societies and a particular study has been made of the ophthalmia neonatorum problem and the use of silver nitrate as a prophylaxis. Attention has been called to the profession regarding the present laws providing for the use of silver nitrate.

We have worked in close co-operation with the Kansas Social Welfare Board and have provided material for additional leaflets to be distributed thru various lay and educational organizations. The committee feels that our problem is largely one of education and propose to direct their efforts in this matter largely thru children of school age.

A study is being made of the state vehicle driver's license law with a view to making certain recommendations.

The Kansas State Board of Health has co-operated in making certain studies regarding vital statistics and the number of births unattended by the medical profession.

The committee is co-operating with the Kansas Society for the Prevention of Blindness in encouraging the establishment of sight-saving classes in the public schools and is making a study of available records with the idea of a program of restoration of sight in favorable cases.

The committee feels it represents to a degree a large number of the practicing physicians in Kansas and has undertaken the responsibility for a section on eye, ear, nose and throat in The Journal of The Kansas Medical Society. We have had unusually good response to this section and hope it will be in some way continued.

We are carrying on a rather extensive correspondence

and gradually building a library of pertinent material and data by which we hope to guide our future efforts.

Respectfully submitted

Lyle S. Powell, M.D., Chairman, Committee on Conservation of Eyesight.

The following is the report of the Committee on Auxiliary:

TO: THE HOUSE OF DELEGATES

The Auxiliary Committee met in Kansas City last October, and went over the past activities of the Medical Auxiliary. It was decided to recommend to the auxiliary that they continue to increase their membership which they had been doing the last few years.

The committee also recommended that the auxiliary try to come in closer contact with the lay public by sponsoring medical exhibits in the different counties where there are public gatherings.

Several of the societies placed exhibits in their communities but on account of misunderstanding and starting at this project late in the year there was not as much activity as the committee hoped there would be.

If those who read this report will kindly go to the Hall of Health, held at the Forum in the City of Wichita during the state convention, they will obtain the idea that this committee is trying to introduce.

Most all of these exhibits will be available for exhibits in the different counties over the state. It is advised that you use this opportunity in selecting and working out your arrangements for a future exhibit at your home community.

The committee also advised the auxiliary to place a number of medical books and pamphlets in their local libraries.

It was advised that the auxiliary approach the members of the board on the library and encourage them to make a budget and select a list of the literature which the committee recommended.

As it has taken several months to prepare this list and get it around it is impossible at this time to make a satisfactory report of the accomplishments of the different auxiliaries.

It is believed by the committee that if these two projects are pushed by the auxiliary for the next few years the lay public will be in closer harmony with the medical profession.

Respectfully submitted

E. J. Nodurft, M.D., Chairman, Committee on Auxiliary.

The following is the report of the Committee on Pharmacy:

TO: THE HOUSE OF DELEGATES

Your recently appointed Committee on Pharmacy held its first meeting on March 22 at the Jayhawk Hotel, Topeka, during the Kansas State Pharmaceutical Association meeting, with Dr. H. W. Duvall, Hutchinson, Dr. J. B. Ungles, Saranta, and your Chairman present. Dr. Harry Lutz and Dr. W. A. Grosjean were unable to attend.

The Pharmaceutical Association was represented by its committee: Mr. MacChilds, of El Dorado, Mr. Kelsey Petro, Topeka and Mr. Otto Kueher, Herington.

Dr. J. F. Hassig of Kansas City addressed the Pharmaceutical Association on this day, and we asked Dr. Hassig and our Executive Secretary, Clarence Munns, to be present.

# BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

## II. THE BLANCH

● Previously, we have described the reasons for the thorough cleansing of raw food materials prior to canning and the methods by which such cleaning is effected. Another basic operation in the commercial canning procedures for many vegetables and some fruits, is known as the "blanch". (1)

In essence, the blanch is an operation in which raw food material is immersed in warm or hot water, or exposed to live steam. The blanch serves a multiple purpose.

First, blanching serves to soften fibrous plant tissue. By so doing, it contracts or expands these tissues and thus insures a proper final fill in the tin container. Second, during the blanch, respiratory gases contained in the plant cells are liberated. This release of gas prevents strain on the can during heat-processing and favors development of a higher vacuum in the finished product.

Third, the blanching operation inhibits

enzymes naturally present in the raw foods and prevents further enzymatic action. Inhibition of enzymes—particularly those inducing oxidative reactions, yields products of superior quality and nutritive values. Fourth, the blanch may serve as an added cleansing measure and also remove "raw" flavors from certain foods. A final function of the blanching operation is to fix or set the natural color of specific products.

In commercial canning practice, blanching is usually accomplished in equipment especially designed for certain types of products. In general, the raw products after thorough washing are conveyed through water or steam by various mechanical devices capable of adjustment so as to subject the raw materials to a particular temperature for the proper period of time.

Such, in broad detail, are the purposes and mechanics of the blanch, a basic operation in many commercial canning procedures.

## AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

(1) 1937 Appertizing or The Art of Canning,  
A. W. Bitting,  
The Trade Pressroom, San Francisco.

*This is the thirty-fourth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



This being our first meeting, this joint committee set out to form a permanent organization, electing Dr. Robert H. Moore as Chairman, and Mr. MacChilds, Secretary-Treasurer. Further organization work will be done at our next committee meeting.

General matters of the ways and means of permanent organization were discussed. Some very constructive suggestions and ideas were presented by Mr. MacChilds, who has had much past experience in similar work. Dr. Hassig and Clarence Munns offered several suggestions along these lines.

It was the opinion of this joint committee we should ask the Kansas State Dental Association and the Kansas State Hospital Association to appoint similar committees of five to work with us. A year ago the Hospital Association expressed itself as willing to assist and to join us in such work.

It was the unanimous opinion that this committee of twenty from the four professional groups who are the most interested in and concerned with public health in Kansas, would be of considerable service to each organization and of invaluable service along cooperative lines to the public health.

There appear before each of these professional groups many problems relating to so-called state medicine and social service ideas, with all of their many and numerous ramifications.

This committee would be most useful and should be able to help considerably in the orderly organization, function and application of any plans regarding state medicine and the care of the indigent in Kansas.

We, the Committee for Pharmacy and Medicine, at this, our first meeting, took the liberty and assumed the responsibility of asking the State Dental Association and the State Hospital Association to join us in this work. These two organizations are as vitally interested in these plans as we are, and we now ask you for approval of our actions.

This joint committee will meet again May 10 in Wichita, during The Kansas Medical Society meeting, and we hope to have present the entire committees from each of these four organizations. At that meeting we trust that we shall have completed our organization and become a workable and functioning joint committee of the groups that are legally and vitally interested in the public health.

We think it better to be organized and ready for any emergency that may be suddenly thrust upon us in regard to socialized medicine. By so doing, we shall have a voice, and in no other way shall we even have a means of expressing ourselves in this matter. It would be a calamity to each of these groups, to public health in general, and to the people in particular, should socialized medicine ever be put into the hands of any political party or politician.

This committee from your State Society wishes to thank Mr. Clarence Munns, our Executive Secretary, for his generosity in helping us to organize this committee, and for providing us with a Secretary. The information that he has accumulated and the use of his office in helping us to take care of the details and paper work that are so necessary if permanent records are to be kept, is greatly appreciated. We further wish to thank Dr. J. F. Hassig for the fine paper that he gave before the pharmacy meeting and for his many helpful suggestions.

As chairman of this committee, I wish to thank the individual members thereof for their support and for their attendance at these meetings.

Respectfully submitted

Robert H. Moore, M.D., Chairman, Committee on Pharmacy.

The following is the report of the Committee on Public Policy and Legislation:

TO: THE HOUSE OF DELEGATES

Public Policy and Legislation is the business of this committee and I shall report briefly on the first function—public policy—the connection between public policy and state medicine is all important. Much has been said about State medicine and I want to quote an editorial on the morning Kansas City Star of April 6, 1938:

"Health insurance on a nation-wide scale was originally considered as a feature of the social security act. It was omitted from the legislation, but agitation for it has been continued by certain members of Congress and by private individuals and organizations. About this revolves the larger and controversial question of state or socialized medicine.

"While there is nothing essentially new in the idea, a health insurance plan of HOLC employees in Washington has become the center of the agitation. These employees pay small monthly fees ranging from \$2.20 for a single person to \$3.30 for a married person, and the HOLC itself contributed \$40,000 to start the program. In one form or another the same plan has been adopted by private corporations, and a plan of institutional care on a comparable basis is followed by hospitals in many parts of the country.

"For good reasons the medical profession, or a majority of it, has objected to state medicine. This explains the present opposition to the HOLC experiment. There is the fear that this particular plan will be nationalized, with administration support.

"Evidence long familiar has shown that reputable medical service ought to be within the reach of much larger numbers of the people. The medical profession is able to make an impressive showing with the instances of voluntary service given without charge or at low cost by large numbers of its membership. This is a great credit to the profession and it ought to be recognized.

"But there still is awaited a broad, generalized program of health protection, available to all, regardless of ability to pay. No more than teachers, lawyers or other professional men should physicians be expected to give their services for nothing. Fair compensation is in order. It is primarily a question as to how the whole problem can be best worked out with the welfare of those in need of the service first in mind.

"Obviously, this ought to be the work of the medical profession itself. More than the profession itself, the public should be skeptical of state or socialized medicine. Any plan ought to be under the direct supervision and control of the medical profession, rather than government and state agencies with their traditional bureaucratic inefficiency and political manipulation. That is a challenge to the profession to formulate an adequate program of its own and thereby leave no excuse for the other."

I wrote the Star the same day and the following editorial appeared April 9th, 1938, quoting part of my letter:

AN ALERT MEDICAL PROFESSION

"The only way to beat socialized medicine is to offer a better plan, which I know we can do. This is the statement of a Kansas leader of the medical profession in a letter indorsing the Star's previously stated position on this controversial question.

"This physician states that the county medical societies should work out plans of generalized health ser-

# PROFESSIONAL PROTECTION

SINCE 1899  
SPECIALIZED  
SERVICE

## A DOCTOR SAYS:

"You fellows always handle things well and it is wonderful to have such an agency available to take the worry away from anyone that tries to be conscientious in his work."

THE

# MEDICAL PROTECTIVE COMPANY

OF FORT WAYNE, INDIANA

WHEATON, ILLINOIS

# THE W. E. ISLE COMPANY

1121 Grand Ave. Entire 2nd Floor.  
Kansas City, Mo.  
Victor 2350.

## A Complete Appliance Service

ISLE SUPERIOR LIMBS  
ISLE SPECIAL LIMBS  
ORTHOPEDIC APPLIANCES  
SURGICAL SUPPORTS  
ELASTIC HOSIERY  
TRUSSES  
CRUTCHES  
CANES

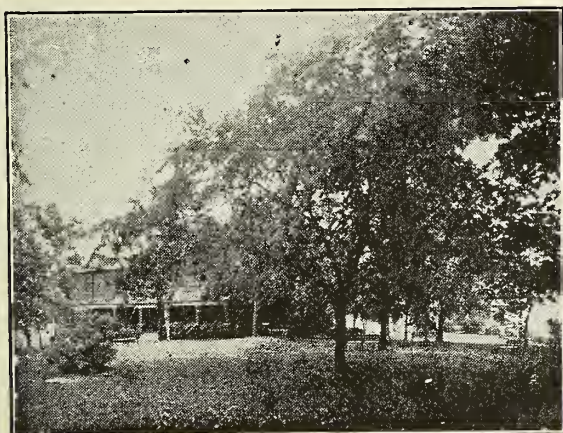
## DOCTOR:

*Visit our exhibit booth  
number 10 at the State Meet-  
ing in Wichita, May 9, 10, 11,  
12.*



# Grandview Sanitarium

KANSAS CITY, KANSAS, (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of  
super accommodations for the care of:

**Nervous Diseases**

**Mild Psychoses**

**The Drug Habit  
and Inebriety.**

Situated on a 20-acre tract adjoining City  
Park of 100 acres. Room with private bath  
can be provided.

The City Park line of the Metropolitan Rail-  
way passes within one block of the Sani-  
tarium. Management strictly ethical.

Telephone: Drexel 0019

SEND FOR BOOKLET

**E. F. DeVILBISS, M.D., Supt.**  
OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.



vice in accordance with the varying needs and conditions, in the 3,000 counties of the United States. It is indicated by this and other letters that some of the county societies already are at work on such programs.

"In addition, Dr. Morris Fishbein, editor of the Journal of the American Medical Association, explains that this organization's present activities 'include a nation-wide inventory of medical needs and a determination of the means for satisfying them.'

"In that will be found the proper answer not only to state or socialized medicine but to criticisms of the national association from within and without its ranks. There can be no other safe answer. If the charges of a medical minority and the threat of expensive bureaucratic interference avail in bringing that response of a broad, workable plan under control of the medical profession itself, a needed contribution to the nation's welfare will have been made."

I have recently talked with physicians from half a dozen states and find that County Societies everywhere are awake to the fact that the best way to neutralize the state medicine idea lies in the grasp of our 3,000 county societies.

In October, 1937 our Committee met in Kansas City and it was unanimously agreed that a series of district meetings should be held. So this was arranged through the Councilors. The Third District held no meeting but your chairman and Mr. Munns addressed the Southeast Kansas meeting at Chanute in December. The First District meeting was held in Topeka, December 12, Dr. Lattimore presiding, and with a fine attendance. Dr. Gsell, Dr. Mills, Dr. Loveland, Dr. Bresette, Mr. Munns and myself addressed the meeting.

On January 16, we held an afternoon meeting at Horton, Dr. R. T. Nichols presiding, and an evening meeting at Lawrence, Dr. Barney presiding. Dr. W. M. Mills, Dr. F. L. Loveland, Dr. L. L. Bresette, Dr. R. W. Urie, Mr. Munns and myself addressed these meetings. January 23, 1938 an afternoon meeting was held at St. Joseph's Hospital at Concordia, Dr. F. R. Croson presiding, and an evening meeting was held at Salina, Dr. L. S. Nelson presiding. Appreciation to Dr. Loveland and Dr. Mills who, tho not committee members, helped us very much. Dr. R. T. Nichols was one of the speakers at Concordia and Salina and Dr. D. R. Davis at Salina. Dr. R. W. Urie at Lawrence.

Meetings were scheduled for McPherson, Wichita, Colby, Hays and Dodge City but on account of the special meeting of the Legislature these meetings were postponed.

I feel that a detailed report here would be out of place but should be discussed at special district meetings. Much important legislation is just around the corner.

Respectfully submitted,

E. C. Duncan, M.D., Chairman, Committee on Public Policy and Legislation.

The following is the report of the Committee on Endowment:

#### TO: THE HOUSE OF DELEGATES

The Committee on Endowment met in Lawrence on January 25 and there were present beside the Chairman Dr. P. A. Pettit of Paola, Dr. F. C. Boggs of Topeka, and Dean Olin Templin, Executive Secretary of the University of Kansas Endowment Association.

(1) In former conferences between Dean Templin and the Chairman of the Committee it had been developed that the K. U. Endowment Association has some funds that

could be spent on medical research or medical education and that he and his group are friendly to any promising suggestions or workable ideas that the profession might bring forward, all of which was passed on to the committee by the chairman.

(2) Dean Templin then explained that his association was designed and developed to (broadly) allow the University to do certain desirable things and to do them in ways not permitted by the set up already established in the Constitution of Kansas. Some of this has to do with the acquiring and holding of real estate, but applies to us chiefly in that by it or through it, gifts, bequests and the like may be directed for more or less specific applications or uses. If these are medical ones, it is and will continue to be so ordered.

(3) Dean Templin, without reserve, offered to us and through us to the profession every facility his Association can furnish to further the accomplishments of the aims upon which we may mutually agree. This includes use of mailing lists, printing, mailing, etc.

(4) We, in turn, pledged a reasonable cooperation in finding and developing his Association's contacts, and in the development and application of its program as it is put in operation.

(5) It was agreed that it will be wise and desirable to connect such special matters as tuberculosis campaigns, cancer educational efforts, venereal menace study and the like, as they become more or less endowed movements, with the Endowment Association. This connection is recommended only for financial safety and financial perpetuity, it being understood that the professional and clinical phases of these matters are always to remain in The Kansas Medical Society.

Respectfully submitted,

H. L. Chambers, M.D., Chairman Committee on Endowment.

The following is the report of the Committee on Venereal Disease:

#### TO: THE HOUSE OF DELEGATES

A report of your Committee on Venereal Disease would embrace our activities in the direction of plans for the future and the accumulation of material, to a greater extent than a statement of things accomplished. The members of the committee, geographically widely separated, have not found it easy to meet together on the few occasions meetings have been called, and for this reason a minimum of meetings have been attempted.

We would advise you that, with the assistance of the central office, we have been collecting an immense amount of data covering venereal disease activity by the various medical societies of the various states. The projects tentatively undertaken by the Committee, and heretofore reported to you, have been studied, and in a few instances actual work has been started.

One of the cardinal points of our program was the plan to hold meetings in the various councilor districts, and to offer a course in Venereal Disease to the physicians in the various communities. Through the generous cooperation of the State Board of Health and the U. S. Public Health Service, these meetings have been made possible without any expense to the State Medical Society. Approximately half of these meetings have been held, and the balance will be completed by early June. Kansas is the only State to receive funds for this purpose this year, and is the first

# When You Prescribe a Support

Specify . . . . . **CAMP**

We carry a full line of Camp Supports for men and women. They are highly and widely approved because of their

**Scientific Construction,  
Light Weight—Comfort,  
And Reasonable Price**

Our staff has been skilfully trained at Camp Schools to select and fit the most efficient support for each individual purpose.

## YOURS FAITHFULLY

For more than twenty-five years the CAMP organization has worked closely with physicians to embody in its supports the findings of the medical and surgical research.

The resulting patented features have justified professional confidence in  
**CAMP SUPPORTS**

for prenatal, postnatal, postoperative, hernial, orthopedic, visceroptotic and other conditions including normal obesity.

Every prescription is faithfully and accurately executed by our expert surgical fitters, trained by the CAMP organization.



Mary M. McCormick, in charge  
of  
*Authorized Camp Service*

## WALKER BROS.

**DRY GOODS CO.**

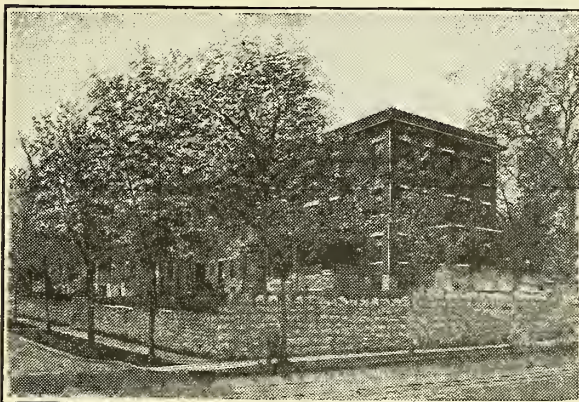
129 North Main

Phone 5-2671

**HERMON S. MAJOR, M.D.**  
Medical Director

## SIMPSON-MAJOR SANITARIUM

3100 Euclid Avenue, Kansas City, Missouri



Electricity  
Heat  
Water  
Light  
Exercise  
Massage  
Rest  
Diet  
Medicine

Nervous  
Diseases  
Selected  
Mental  
Cases.  
Alcohol  
Drug and  
Tobacco  
Addictions

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.



State to present a series of post-graduate talks to the doctors by a speaker selected from the membership of the Society. Usually these speakers are selected from the faculties of medical schools or from the Department at Washington. It is interesting to note that up to the present time it has been indicated by the Kansas physicians attending these lectures that they very much prefer one of their own men to present the courses. Our contact with the membership of the various county societies has been most satisfactory, and it is our opinion that we are accomplishing a definite step forward in correlating the various methods of caring for the indigents and semi-indigents suffering from venereal disease.

Another activity of the Committee was to have been the publication of a simple brochure on the diagnosis and treatment of venereal disease, and in turn this brochure is now in the process of formulation. It will be published in the next few weeks at the expense of the State Board of Health, and mailed to all the doctors in Kansas, and without expense to the State Medical Society. It will, however, give full credit to the State Medical Society's Committee on Venereal Disease, and will be offered on that basis, with the cooperation of the State Board of Health rather than a strictly departmental publication.

Your chairman has had an immense amount of correspondence and personal contact with the physicians in Kansas, and is pleased to report that apparently there is a sincere awakening on the part of the Medical Profession to the problems which confront us, and a definite inclination to cooperate in every possible way in order to provide adequate care for indigents suffering from venereal disease to the extent that will make any governmental activity along this line entirely unnecessary.

Very truly yours,

Arthur D. Gray, M.D.,

Chairman Committee on Control of Venereal Disease.

The following is the report of the Auxiliary of The Kansas Medical Society:

#### TO: THE HOUSE OF DELEGATES

Kansas has twenty-two organized counties. Eleven auxiliaries in Central Kansas represent the twelve counties of the Central Kansas Medical Society.

Efforts in organization to strengthen our number have been carried on thru correspondence with the councilors and by the president of the auxiliary to the president of county societies where there was no auxiliary. So far this year no new counties have been organized but we have gained in membership.

Hygeia has been stressed and several counties reported having had silver teas, the proceeds being used for Hygeia subscriptions to be placed in rural schools and the reading rooms of the YWCA and YMCA.

Much educational work has been done in the counties by having physicians speak on medical subjects at their auxiliary meetings. Reviews, lectures, slides, study envelopes and radio broadcasts have been sponsored. The importance of exhibits at county and state fairs has been stressed. A list of medical and public health books have been presented. Health programs, plays and essays have also been carried on by auxiliary members in literary clubs, P.T.A. organizations, business and professional women's clubs. The auxiliary has assisted the Red Cross, Women's Field Army, Boy Scouts and Girl Scouts, needy children and many other civic and philanthropic projects.

The work of the public relations committee in every county has been encouraging. This work has been promoted by active speakers' bureaus, sending of letters to lay organizations telling of this service and inviting them to ask for speakers; preparing mailing lists to be used among lay organizations for distributing health literature, and aiding county doctors in giving diphtheria immunization and vaccinations.

The president has visited most of the organized counties during the year.

Respectfully submitted,

Mrs. R. W. Urie, President, The Kansas Medical Auxiliary.

The following is the report of the Committee on Maternal and Child Welfare:

#### TO: THE HOUSE OF DELEGATES

Through the executive secretary of the Society I have been asked to make a report for the Committee on Maternal and Child Welfare. I am glad to state that we have had a very cooperative group of doctors in that committee.

There has not been a great deal of work finished in this field during the past year because this committee has not been in existence in the state for a very long time, and it is not best to jump at too many conclusions without first investigating any suggestions which might come up.

We had a fine meeting in Topeka in December, and most of the members were present. We first discussed the infant and maternal mortalities in our state, and after deciding they are too high, asked the State Board of Health to secure more thorough histories in all cases of maternal and infant deaths, the procedure carried out in the labors, as well as to secure histories and reasons for all cesarean sections.

Dr. Lyle Powell, chairman of the Committee on Conservation of Eyesight was present and measures were taken to cooperate with that committee to help prevent ophthalmia neonatorum.

Mrs. Marian Post, representative of the American Birth Control League, presented a report of the program of her organization and requested the assistance of the Society in carrying out a program of this kind in Kansas. She was asked to furnish further data concerning the efficiency of their work, how the clinics are organized, etc., and that data has just arrived in part and is in the office of our executive secretary for study of the committee which carries on the work during the coming year.

A report was made by Dr. Ross, of the State Board of Health, on the work which had been completed in post-graduate lecture courses in obstetrics and pediatrics during the past year, and we have outlined similar courses in different parts of the state which are to be reached during the summer of 1938. Final word from the speakers has not been received as yet, but letters have been sent out and the final arrangements will be completed in the very near future. Letters were sent out to the various county societies in the parts of the state to be covered, asking for suggestions for places, times, and speakers, and their suggestions were all considered.

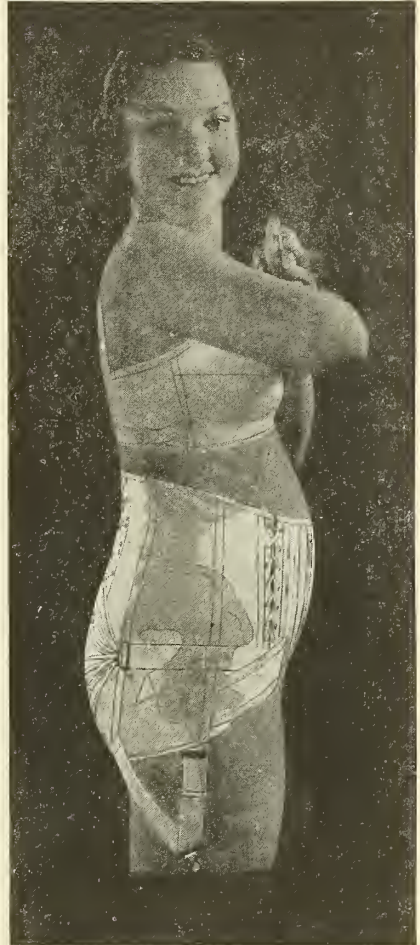
There was considerable discussion regarding the present immunization conditions and regulations within our state, and a sub-committee was appointed to make further investigations into the matter. It was definitely agreed that the small pox condition in Kansas is very bad and we wish that the committee for this work for next year and for many

# MATERNITY SUPPORTS

One author\* writes: "A maternity corset not only aids in disguising the pregnancy figure but also is of great value in preventing a number of the complications of pregnancy. It should support the abdominal wall, the spinal column and the pelvic girdle. By supporting the abdominal wall, it holds the growing uterus in place. ... the contour of the abdomen wall will be better preserved... With the back supported, the change in posture due to the forward displacement of the uterus is less fatiguing and many backaches are eliminated. Similarly, support of the pelvic girdle prevents sacroiliac strain with its accompanying pain and backache."

• • •

The sections of Camp prenatal supports are brought firmly about the pelvis by means of the over-strap with its buckle and lacing device. When the pelvis (the base of the body) is thus perfectly fitted, the upright sections of the support will function without undue pressure upon the abdomen or back.



*The support shown is designed for all types of build: thin, intermediate and stocky.*

\*BECK, page 98, "Obstetrical Practice," published by the Williams and Wilkins Co., 1935.

**CAMP**  
TRADE MARK  
*Supports*



S. H. CAMP & COMPANY, JACKSON, MICHIGAN

Offices in: New York, Chicago, Windsor, Ont., London, England • World's largest manufacturers of surgical supports





years to come, will adopt a plan which might require better vaccination laws in an effort to bring our state to a much higher standard in the efforts to prevent this disease.

We also recommend that the State Board of Health investigate the quarantine laws of neighboring states, so that efforts can be made to smooth out the differences of rulings at the state lines.

The hope is that the next group may take up where we have only begun, and they can obtain records from the executive secretary of our Society.

Respectfully submitted,

Harry J. Davis, M.D., Chairman, Committee on Maternal and Child Welfare.

The following is the report of the Committee on Scientific Work:

#### TO: THE HOUSE OF DELEGATES

The Committee on Scientific Work at a meeting held on January 25 requested that these statements and recommendations be circulated for consideration by county medical societies.

1. That each county medical society hold at least one scientific meeting each month. Such meetings tend to keep our members alert professionally, and by their frequency and regularity afford an inspiring discipline to them and are a means of valuable publicity for our public.

2. Because the public is especially ready, even anxious for it, we believe that the county societies should push hard on scientific programs covering cancer, heart disease, venereal disease, and preventive medicine and that they should employ every reasonable and dignified means of getting information on these subjects out to the public.

3. As another and even pleasanter means of keeping our members up-to-date and professionally fresh and wide awake, we recommend that the president of each county society suggest frequently to his constituents that they attend at least two intersectional medical meetings each year. We recommend any or all of these; Annual Session of the American Medical Association (San Francisco, this year), The Kansas Medical Society, the Kansas City Southwest Clinical Society, the Rocky Mountain Medical Conference, the Oklahoma City Clinical Society, the Interstate Medical Assembly, the Omaha Clinical Society, and the St. Joseph Clinical Society.

4. We join the Committee on Venereal Disease in their recommendation that you as officials of your society and as, in a way, responsible to the public in your community make a survey to determine whether modern means (dark field study, etc) are at hand for diagnosis of primary lues. The intelligent public under the leadership of Surgeon General Parran is now keen to know and to do something about venereal disease. It is for us "the hour of fate" for increasing and consolidating the leadership that is properly expected of us. Should we fail now in this matter, we are promised a set up of clinics under federal and state control to take over the situation.

5. There is a general drift toward making the attending physician more and more responsible in a financial way for the things that occur under his supervision. We may expect soon to see damage suits brought against men who permit the birth of luetic infants or the development of gonorrheal ophthalmia in the new born. Be careful to give your people complete examinations and proper treatments so far as they will permit them.

6. The general movement of twenty-five years or so ago,

for annual examinations failed because of non-cooperation on the part of the profession. Possibly the annual examination is oftener than necessary, but there should be check overs at regular intervals and these should be standardized and made a means of education for John Citizen and of training him to respect and trust his physician. A suitable form accompanies this bulletin. Have your members use such forms, file them and refer to them as needed. Duplicates in the hands of patients are probably helpful in most cases. Such examinations are greatly helpful in the early detection of cancer, tuberculosis, prostate trouble, some anaemias and the like. Charge a proper fee and make a real examination.

7. A friendly layman wrote the following for me: "Medicine is also receiving criticism for its alleged lack of organized interest in preventive medicine. Can any county medical society defend itself on this point until it is able to show that it has exhausted all possibilities to immunize its county against small-pox and diphtheria? Likewise, until it has demonstrated beyond a doubt its willingness to cooperate in school examinations, tuberculosis programs, efficient quarantine, efficient reporting of public health statistics and the other important factors for prevention and reduction of disease. This committee believes that it would be a splendid thing if each county medical society would provide an early meeting for discussion of no other topic than the medical profession taking stock of itself, and considering ways and means wherein it can make further organized contributions to the question of preventive medicine."

8. Again we assure you that this committee desires to assist the county societies in any way that it can. We are quite as much interested in applying the certainties of science to the common every day problems of the doctor and his work as we are in the spectacular things that make front page position in the flamboyant press. Call on us if you have even a suspicion that we can help you.

Respectfully submitted,

H. L. Chambers, M.D., Chairman on Scientific Work.

The following is the report of the Committee on Medical School:

#### TO: THE HOUSE OF DELEGATES

The committee held meetings in Kansas City and Emporia during the year, one of which included, through courtesy of Dean H. R. Wahl, a thorough inspection of the University of Kansas School of Medicine.

Some of the projects commenced which were completed during the past year are as follows:

1. Consideration was given as to whether the facilities of the Medical School might be improved through consolidation of the Lawrence and Rosedale divisions of the school into a single four year course at Rosedale. Decision was made that this plan is not economically or scientifically practical at the present time.

2. A recommendation was made to the Medical School that it consider the possibilities for establishing a library loan service for Kansas physicians. Dean Wahl is attempting to complete this project at the present time.

3. Committee recommended to the Editorial Board of the Journal that books received by the Journal for review purposes might serve a wider purpose if they

# IN CONVALESCENCE

## *It's More Calories*

### PROPERTIES OF KARO

Uniform composition  
Well tolerated  
Readily digested  
Non-fermentable  
Chemically dependable  
Bacteriologically safe  
\*Non-allergic  
Economical

\*Free from protein likely to produce allergic manifestations.

### COMPOSITION OF KARO

(Dry Basis)

Dextrin.....	50%
Maltose.....	23.2%
Dextrose.....	16%
Sucrose.....	6%
Invert sugar.....	4%
Minerals.....	0.8%

### KARO EQUIVALENTS

1 oz. vol.....	40 grams
	120 cal.
1 oz. wt.....	28 grams
	90 cal.
1 teaspoon....	15 cal.
1 tablespoon...	60 cal.

Convalescent children show a low metabolism for several weeks following the disappearance of an infectious fever as a consequence of generalized cellular damages.

The high caloric diet is indispensable. It is made possible by reinforcing foods and fluids with Karo. Every article of diet can be enriched with calories derived from Karo.

*Infant feeding practice is primarily the concern of the physician, therefore, Karo for infant feeding is advertised to the Medical Profession exclusively.*



### FREE to Physicians only:

Convenient Calculator of Infant Feeding Formulas; accurate, instructive, helpful. On receipt of Physician's prescription blank, giving name and address, the Calculator will be forwarded. Write Corn Products Sales Co., Dept. SJ-4 17 Battery Place, New York, N. Y.



were placed in the Medical School Library, rather than in the Stormont Medical Library, as is now done. The Editorial Board has arranged a joint meeting with the Committee on Stormont Medical Library which will be held in the near future to discuss possibilities in this regard.

4. Considerable discussion has been given to the advisability of consolidating Stormont Medical Library with the Medical School Library and a joint meeting of this committee with the Committee on Stormont Medical Library is contemplated, for consideration of legal and practical possibilities in this proposal.

5. An expression of approval was forwarded to the Editorial Board for its courtesy in supplying the Medical School Library with its exchange periodicals and journals.

6. A recommendation was forwarded to the Medical School that it attempt each year to provide full and complete exhibits of its work at the Society annual sessions.

7. A survey was conducted through information received from all medical schools in the United States as to the conduct of post graduate courses, medical economics courses, and art of practice courses, in these medical schools. Inasmuch as this survey developed particularly interesting information a request was made that one of the members of the committee should prepare a report thereon for publication in the Journal.

8. A project was approved and consummated during the year through cooperation from Dean Wahl wherein approximately twenty-five Kansas physicians presented lectures on medical economics and art of practice at the Medical School.

9. Dean Wahl asked for the suggestion of the committee as to whether present Medical School section in the Journal should be continued.

10. The committee requested that this be done.

11. A further recommendation was made that the Medical School be asked to continue its policy of carefully considering the financial status of all applicants for indigent medical care and its other policy pertaining to the private practice of medicine as an institution.

The committee takes pleasure in presenting the following report pertaining to the Medical School which Dean Wahl has been kind enough to prepare. (To be published in May issue of the journal.)

Respectfully submitted

Fred J. McEwen, M.D., Chairman, Committee on Medical School

The following is the report of the Committee on Control of Cancer:

#### TO: THE HOUSE OF DELEGATES

There were three men whose tenure of office on this committee terminated during the past year. These places were filled by the reappointment of myself as chairman of the Committee and adding of the names of Dr. L. G. Allen of Kansas City, Kansas and Dr. James Hibbard of Wichita.

There has been no change in the general policy of the committee. The committee has continued to work on its double barrelled educational program.

The result of the very successful enrollment of members in the Women's Field Army of Kansas has made it possible for that organization to be of very great assistance in the lay educational campaign. In fact, the organization has become so active and so efficient that they have planned and conducted so many public meetings that the greatest difficulty the committee has had is in supplying them with speakers. This demand for speakers was so great as to make necessary one change in the policy of the committee, namely, that the members of the Women's Field Army have been instructed to make their application for speakers to their respective county medical society. Requests for speakers, as they have come to the committee, have been referred to the local county medical societies. This has had the very good effect of increasing the interest in cancer. It has also helped very materially in promoting an even greater interest on the part of the profession in our efforts at professional education.

The above has made it possible for the committee to concentrate its efforts more definitely upon a campaign to increase professional interest in the general cancer problem. This has been done by encouraging increased frequency of papers on this subject by members of local county societies. The committee, in response to the offer of the Editorial Board of our Journal signifying their willingness to create a Cancer Section, has arranged for the publication of a series of articles on cancer of the different organs. A few of these articles have already been published and they will continue until the entire field of clinical cancer has been covered. It is the plan of the committee then to collect these articles and have them published in a brochure on cancer. This brochure will be mailed to each member of the Society. It is hoped that such a brochure will find a place on the desk of each individual member and will be helpful as a handy reference manual.

The committee has found this year a very much greater interest in the subject of cancer and is glad to acknowledge a ready response on the part of the profession to aid in this educational campaign. It is the belief of the committee that the educational campaign being carried on will be mutually beneficial to the public and to the profession.

It is further the belief of the committee that this education campaign offers an opportunity to the profession to interpret the ideals of the profession to the public. An opportunity that must not be neglected. The public is wanting information. This is evidenced by the very great number of articles on cancer that have been appearing in the various lay magazines and the frequency with which radio talks are given on this subject.

It appears obvious that the public will secure this information from some source and it would be unfortunate indeed if organized medicine did not arise to its opportunity and furnish the information and the leadership for which the public is asking. It is our hope that this policy will be continued until a much better understanding and a much greater confidence exists between the public and the profession. It is an opportunity, let us not neglect it.

The committee is still planning to repeat the professional group meetings such as have been conducted during the past two years. This time, however, the meetings will be in cooperation with the State Board of Health and the expenses of the meeting will be defrayed from the Social Security Funds.

Respectfully submitted,

C. C. Nesselrode, M.D., Chairman, Committee on Control of Cancer.

## THE TROWBRIDGE TRAINING SCHOOL

Established 1917  
A HOME SCHOOL for NERVOUS and BACKWARD CHILDREN  
The Best in the West

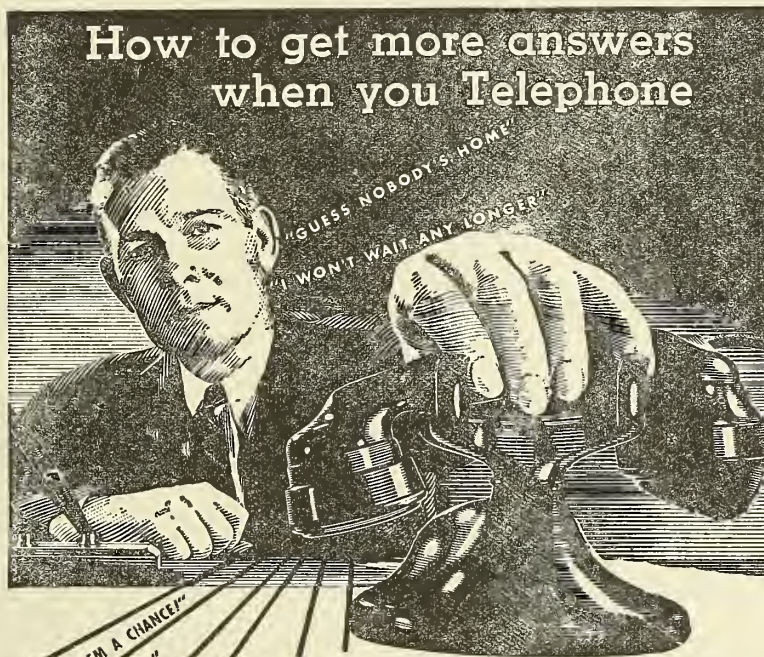
Beautiful Buildings and Spacious Grounds. Equipment Unexcelled. Experienced Teachers. Personal Supervision given each Pupil. Resident Physician. Enrollment Limited. Endorsed by Physicians and Educators. Pamphlet upon Request.

1850 Bryant Building

E. HAYDEN TROWBRIDGE, M.D.

Kansas City, Mo.

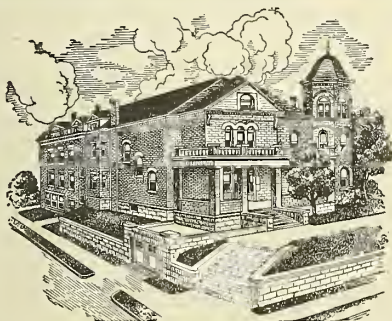
## How to get more answers when you Telephone



To avoid wasting your call...and inconveniencing the person you are calling ...try to wait about a minute before you hang up. *You'll get more answers!*



Help yourself to better service...be slow to hang up when calling . . . be quick to answer when called.



## Alcohol. Barbital. Morphine

Addictions Successfully Treated Since 1897  
by the Methods of Dr. B. B. Ralph.

WRITE FOR DESCRIPTIVE BOOKLET

## THE RALPH SANITARIUM

RALPH EMERSON DUNCAN, M. D., Director

Established in 1897

529 Highland Ave.

Telephone Victor 4830

Kansas City, Mo.



The following is the report of the Committee on Hospital Survey:

TO: THE HOUSE OF DELEGATES

It is the belief of this committee that since a survey of the number and kind of Kansas hospitals had not been made during recent years, that a project of this kind should be the foremost work of the committee during the year. A questionnaire of this kind was prepared and forwarded to the secretary or official representative of each county in the state and replies have been received to date from ninety-one counties. The information obtained is now being tabulated and it is planned that a detailed account of these findings will be published in an early issue of the Journal.

It is the thought of the present committee that next year's Committee on Hospital Survey should conduct a survey among the individual medical hospitals to determine the system of government of each of these hospitals, type of equipment they own, and the type of equipment they should have to enable full and complete medical service in all portions of the state. Likewise that the need for additional hospital facilities in certain counties should be considered. In other words that the medical profession should assist the hospitals of Kansas in making certain that all communities have adequate hospitalization within reasonable and convenient distance, that new hospitals are economically located and that every hospital has all laboratory equipment and other incidental facilities necessary for it to serve its community and its local medical profession to the fullest extent. In addition to this, the committee discussed or considered action on the following subjects:

1. The increase in the number of small so-called hospitals, established by cultists and other persons which are usually inadequately equipped and inadequately protected from fire hazards. Discussion was given on this problem as to whether a law requiring hospital licensure and hospital inspection by the state would afford better public protection in this regard and a survey was made of the activities of other states in this direction. It is the opinion of the committee that a joint committee should be established with the Kansas State Hospital Association to study hospital licensure acts existing in a few other states with a purpose in view of obtaining similar legislation in Kansas.
2. Establishment of the annual meeting of the Kansas State Hospital Association as a section of the annual session of The Kansas Medical Society. This was accomplished and the Kansas State Hospital Association will have its first meeting in conjunction with the Society at the Wichita meeting this year.
3. Establishment of a hospital division in the central office of the Society. Investigation was made through the Kansas State Hospital Association as to whether it would be interested in this possibility and information was obtained that the Association would be glad to cooperate in this regard if such a plan meets with the approval of the Society.
4. Hospital scientific exhibits at Society meetings. It is the impression of the committee, since arrangements have been made for the Kansas State Hospital Association to hold their meeting at the same time as the Society, that the committee on arrangements for scientific exhibits at the annual Society meeting should have suitable hospital exhibits which will attract greater numbers in attendance at this meeting.
5. A survey was made of the existence and experience with hospital lien laws in other states and this infor-

mation is now available for consideration by the committee at its next meeting.

6. Arrangements were made wherein this committee will serve in a liaison capacity with a similar committee of the Kansas State Hospital Association, in order to promote a more close and more efficient cooperation between the two organizations.

Respectfully submitted,

A. R. Hatcher, M. D., Chairman  
Committee on Hospital Survey

The following is the report of the Committee on Border Line Groups:

TO: THE HOUSE OF DELEGATES

The Committee on Border Line Groups is a new committee formed by the Council this year to study lay groups furnishing auxiliary medical services to the physician. •

Soon after its formation, the chairman discovered that this was the first attempt made to study this problem. Much of our early work was devoted to the sending out of questionnaires to other state societies, and attempts to obtain material, upon which to base our study. Unfortunately, we were able to obtain only a limited amount of information, and hence were forced to form our opinions upon the results of our own observations. The committee was delayed by this search for material, and up until the date of this report has had only one meeting. At this meeting held in Wichita on March 20, 1938, the committee decided that:—

In recent years, because of the tremendous expansion in the field of medicine, with a resultant increase in many technical services, there has developed a large group of lay workers furnishing auxiliary services to the physician. As a result of this rapid growth, there has developed many abuses. The tendency is for these auxiliary medical workers to operate more and more independently of the physician, gradually encroaching upon the field of medicine, and assuming many of the privileges rightfully belonging to the doctor of medicine.

Recognizing these abuses, and appreciating the need for a study of this problem, the Council of The Kansas Medical Society this year appointed a committee on Border Line Groups to study and make recommendations on this problem. At its first meeting, the committee, after discussion of the various aspects of this problem decided upon the following general plan for studying it.

That the objectives of the committee would be:—

1. To improve the quality of auxiliary medical services.
2. To keep the practice of medicine in the hands of the doctor of medicine, who is qualified and licensed to deliver these services.
3. To correct abuses in this field, where lay workers trained in their various fields, may be practicing medicine rather than acting as technical assistants.

In our study of the various groups of technical workers involved in this question, it was decided that the following principles should be used as a guide:—

1. That all lay workers in the field of medicine should be under the supervision of a doctor of medicine.
2. That the degree of supervision of the layman in medical work should be proportionate to the proximity of his work to the practice of medicine.

# THE Lattimore Laboratories

TOPEKA, KANSAS

J. L. Lattimore, M. D. Director

A. C. Keith, B. S. Chemist

Allen Gold, M.A., M.T.

H. C. Ebendorf, M. T.

We invite consultation about the case that needs pathological service.

Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00

*Containers furnished upon request.*

## OFFICES:

Topeka, Kansas

El Dorado, Kansas

Sedalia, Mo.

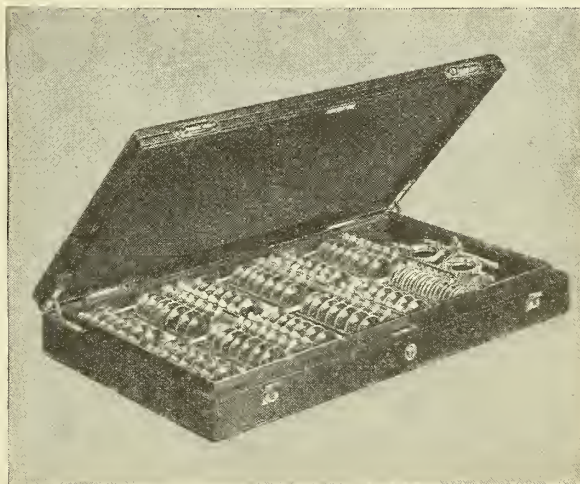
McAlester, Okla.

# TILLYER CATARACT SET

*Simplifies  
accurate refraction*

YOU can refract aphakic patients simply and accurately with AO's Tillyer Cataract Trial Lens Set. Trial Lenses are made in the exact sphere and spherocylinder combinations of the Rx to be worn by the patient. Focal distance is at once standardized and exact. The possibility of error from complicated focal computations is eliminated. Hence your refraction is more accurate; and your time is saved.

Tillyer Cataract Trial Lens Set is a product of the long experience and skill of American Optical scientists. An AO representative will gladly demonstrate this set at your request.



# AMERICAN OPTICAL COMPANY



At our next meeting the committee, using the above principles as a guide, expects to consider specifically some of the groups, who are furnishing auxiliary medical services. Among these groups are lay laboratory technicians, lay x-ray technicians, lay physiotherapists, lay anesthetists, and clinics for the treatment of speech disorders.

Respectfully submitted,

George E. Milbank, M.D., Chairman,  
Committee on Border Line Groups.

The following is the report of the Committee on Medical History:

#### TO: THE HOUSE OF DELEGATES

The historical report of the Society for the year 1937-1938 shows that organized medicine in Kansas has given much effort toward the solution of problems pertaining to the public and to the profession.

Much time has been given by the officers and committees of the Society to cooperation and conferences with the Kansas State Board of Social Welfare and other agencies interested in medical service. As a result of this several interesting activities were commenced. A resolution was passed in April by the Committee for Indigent Medical Care of this Board in which lump sum or controlled fee schedule contracts with the county medical societies were approved and recommended for adoption by all county welfare boards. A blind treatment program was also approved and instituted by the Division for the Blind of the same Board, wherein medical and surgical treatment will be offered to blind assistance clients in a manner similar to usual practice.

Considerable activity was devoted to cults and quacks. Several injunctions were granted under the injunction law which the Society succeeded in passing in the 1937 session of the Legislature. One of these was the case of State v. W. W. Cooper, cancer specialist of Altoona, who holds no license in any branch of the healing art, and which was appealed to the Supreme Court. The case of State v. B. L. Gleason, osteopath of Larned, Kansas, was

also heard in the Supreme Court. The Society submitted a brief amicus curiae in this case, which will decide whether an osteopath has the right to practice medicine and surgery in Kansas.

Much time was given to conferences with the State Tax Commission toward working out a satisfactory solution for payment of Sales and Use Tax by physicians.

Major post graduate courses sponsored during the year by the Society have included: Obstetrics and Pediatrics, in cooperation with the Kansas State Board of Health; Venereal Disease Control, in cooperation with the Board of Health; and Tuberculosis Control, in cooperation with the Kansas State Tuberculosis and Health Association.

The Society also cooperated with the Women's Field Army in sponsoring a lay education program on cancer. Many of the county medical societies were active in public information meetings and campaigns, and a great many speakers have been provided for lay educational programs of various sorts.

An innovation this year was a series of councilor district meetings sponsored by the Committee on Public Policy for the discussion of medical organization and business problems of the Society.

Membership during the past year totalled 1,504, which is the largest on record of the Society. County medical society charters were granted Jefferson and Barber Counties, and an application has been received from Kiowa County.

In view of all these activities, and many others which cannot be included for lack of space, this Committee feels that this has been an outstanding year in Society history.

Respectfully submitted,

W. S. Lindsay, M. D., Chairman

#### FAIRMOUNT MATERNITY HOSPITAL

Offers a modern fireproof hospital for the seclusion and care of the unmarried mother. Adoptions arranged if desired.

FRED B. KYGER, M.D. Obstetrical Director

1414 East 27th Street, Kansas City, Mo.

### Call At HOCKADAY'S

#### One Stop Service

Season to change to Summer Oil and Grease,

Wash and Polish

WICHITA

Williams & Topeka

3-2202



## Hotel Jayhawk

TOPEKA ~ KANSAS

Main Dining Rooms and Coffee Shop

Air Conditioned and Refrigerated

Many Private Dining Rooms Available for Special Parties

THE MOSBY HOTEL CO.

N. M. Mosby, Pres. & Gen. Mgr.

# GREATER SAFETY

In the Arsenical Treatment of Syphilis

500,000

1,000,000

1,500,000

2,000,000

3,000,000

**INJECTIONS OF MAPHARSEN  
HAVE BEEN ADMINISTERED  
WITHOUT ANY FATALITIES  
HAVING BEEN REPORTED**

Mapharsen (meta-amino-para-hydroxy-phenylarsine oxide hydrochloride) is available in single dose ampoules containing 0.04 and 0.06 Gm., each in individual packages with or without distilled water. It is also supplied in ten-dose ampoules, containing 0.4 and 0.6 Gm., for use by hospitals and clinics.

**PARKE, DAVIS & CO. - DETROIT**

The World's Largest Makers of Pharmaceutical and Biological Products





## Cosmetics and Your Patient's Morale

☆



THE DOCTOR IS OF NECESSITY A STUDENT OF LIFE. Each new patient presents a new study, a new problem. Psychology plays an important role in the course of treatment he prescribes. With some patients he must be frank to a point of harshness, with others he must be gentle and coaxing. The nature of the illness and, more particularly, the nature of the patient determine his attitude. He knows from experience the value of bolstering his patient's morale. As a student of psychology he knows that few things are more depressing to a woman than the fear that she is losing her charm; that when she no longer cares how she looks the chances are she has lost touch with a vital interest in life. And because he appreciates the importance of a sensible interest in personal appearance he quite rightly encourages his patients to look their best at all times. FINE COSMETICS appeal to that interest. That is why they deserve to be recommended by doctors who are, after all, greatly concerned with their patient's morale.

---

**LUZIER'S, INC., MAKERS OF FINE COSMETICS & PERFUMES**

---

KANSAS CITY, MO.

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

MAY, 1938

Number 5

## OBSERVATIONS ON THE PHYSIOLOGY AND PHARMACOLOGY OF THE CORONARY CIRCULATION\*

A. M. Ginsberg, M.D.

Kansas City, Missouri

O. O. Stoland, Ph.D.

Lawrence, Kansas

The heart muscle obtains its blood supply from the coronary arteries. These arteries have their origin in the aorta, behind or above the aortic valve, and are so situated that the action of this valve in no way interferes with the movement of blood from the aorta into these coronary vessels. In recent years, particularly through the work of Wearn and his co-workers<sup>1</sup>, the coronary arteries have been found to have an anastomosis, with a very complex system of channels. These authors have demonstrated a very extensive extra-cardiac anastomosis of the coronary arteries, extending into the mediastinum, lungs, parietal pericardium, both surfaces of the diaphragm, and through the vasa vasorum to the abdominal aorta. It is pretty well established today that the major portion of the coronary artery blood flow finds its way either through the arterioles and capillaries into the coronary sinus and thence into the right auricle, or through the Thebesian veins into the heart chambers; however, some portion of the blood flow, after leaving the coronary arteries, will find its way also into the heart chambers either by way of the arterio-luminal vessels or by way of the arterio-sinusoidal vessels. The above mentioned vascular channels anastomose with each other, thereby creating an intricate circulation peculiar to the heart.

Likewise peculiar to the heart is the influence of cardiac contraction on its circulation. Normally the amount of circulation through the coronary system is probably determined primarily by the mean arterial (aortic) pressure. The rate of blood flow through

the coronary system varies during the different phases of the heart cycle. Investigators have not been able to agree as to the relation of these phases to the rate of flow, but the majority feel that there probably is a greater rate of flow during diastole than during systole. The muscle tension developed during systole tends to compress the coronary vessels sufficiently to interfere with the flow. Anrep<sup>2</sup> has produced evidence to indicate that there is an actual decrease in the coronary circulation during increased aortic pressure brought about by increased tone of the heart; however, this interference of the circulation might be counteracted partly by the increased pressure.

Since the mean aortic blood pressure is the primary factor in determining the rate of flow in the coronaries, and since the maximum flow occurs during the diastolic phase of the heart cycle, it is then apparent that the mean diastolic pressure becomes an important factor in determining the amount of circulation through the myocardium. The fact that a high systolic pressure accompanied by an increased cardiac tone creates a condition unfavorable to adequate circulation through the coronary system would raise the question of whether any desirable effect could be obtained by the mere dilation of the vessels. It would probably be more desirable to reduce the high cardiac tone and the high systolic tension, thus setting up a condition more favorable to adequate coronary flow. However, the need for increased oxygen supply during high systolic pressure, accompanied by an increase in the work done by the heart, cannot be attained except through an increase in the coronary blood supply. When the body in general requires an increased blood supply, it is met by an increase in the output of the heart. However, Anrep<sup>2</sup> has shown that the circulation through the coronary vessels is little affected by the heart output, providing the mean pressure is unaltered. The increased demand for blood by the myocardium is met by an adjustment in the size of the coronary vessels, and thus the blood supply is increased without much change in mean aortic pres-

\*From the Departments of Medicine and Physiology, University of Kansas School of Medicine.



sure. Thus we see that most conditions requiring an increased systemic blood supply have a tendency to cause coronary dilation. The mechanisms which are responsible for coordinating the coronary circulation with the needs of the heart have not as yet been adequately demonstrated. As in most other systems, both nervous and hormonal mechanisms are involved.

Two sets of nerves, namely the vagus (parasympathetic) and the sympathetic, have been shown to supply the coronary vessels. The dilator action of the sympathetic innervation is easily demonstrated, but the theory that the parasympathetic exerts a constrictor influence is not so well established. It has been found that, after a certain degree of atropinization, stimulation of the vagus nerve produces no inhibitory effects upon the heart, but it does cause a decrease in the flow of blood through the coronary vessels, indicating coronary constriction.

Experimentally we know that small doses of adrenalin injected into the blood stream produce a dilation of the coronary vessels. Therefore, it is logical to assume that, during increased neuro-muscular activity when there is an increased flow of impulses through the sympathetic system, the adrenalin output is also increased to aid in producing a suitable dilation of the coronary vessels for adequate blood supply, needed by the heart during these periods of high activity. Failure of such compensatory mechanism to induce coronary dilation might result in anoxemia to the myocardium.

The need for a constrictor mechanism is not so apparent, and such a mechanism may not exist. It is known that extracts of the posterior lobe of the pituitary gland have a constrictor action on the coronary vessels.

The pharmacology of drugs employed in the coronary circulation has been widely studied. Some of these have a tendency to produce dilation, others to produce constriction, and still others to have no effect at all. The nitrites have been used most extensively when coronary dilation was desirable. There are other drugs which have dilator effects on the coronary circulation, some of which we have studied and reported on at various times.

The conclusions here reported were reached by experiments conducted by the following method: Since three-fifths of the blood which enters the coronary system returns to the right atrium through the coronary sinus, the rate of flow was studied by cannulating this sinus with a Morawitz cannula and measuring the outflow.

#### GLYCOCYAMINE<sup>3</sup>

This drug is guanidine acetic acid, closely resembling creatine, from which it differs in that it

has no methyl group. The possibility of a beneficial action on the coronary circulation was suggested by the work of Major and Weber<sup>4</sup>, who found that it had a depressor action.

Our experimental studies revealed that glycyamine produces a fairly pronounced and lasting increase in blood flow through the coronary vessels, not due to changes in blood pressure or heart rate. We have used glycyamine orally on patients, and while it is difficult to form any definite conclusion, we still feel that it produces certain beneficial results, in that cardiac and nervous symptoms either disappear entirely or are lessened in severity or duration. It is our opinion that glycyamine improves the coronary circulation, especially in hypertension, by lowering the blood pressure, and at the same time dilating the coronary vessels.

#### EPINEPHRIN AND EPHEDRINE<sup>5</sup>

Ephedrine has an action similar to that of epinephrin. The difference lies in the more prolonged action of ephedrine. In our dogs, epinephrin (adrenalin) produced an increased flow of blood through the coronary vessels. While the increase was marked, it was of short duration, and it was thought that its action on the coronary circulation could be largely accounted for by the increased blood pressure. Epinephrin also has a dilator effect through sympathetic nerve stimulation, which fact might account for some of the increased blood flow through the coronary system.

It has been well established that ephedrine increases coronary flow in the mammalian heart and heart-lung preparations. In our work on the intact animal, we found that a suitable dose of ephedrine produced a fairly marked and sustained increase in coronary flow, and that a rise in blood pressure lasting about three to six minutes occurred. It was noted that the maximum increase in coronary flow usually occurred after the blood pressure had returned to the pre-injection level, and that frequent, repeated injections of ephedrine caused a progressive diminution of its effect on the coronary circulation, completely reversing its action and decreasing the coronary flow. From these experiments, we have felt that frequent injections of ephedrine were contraindicated in cardiac therapy.

#### AMINOPHYLLIN (THEOPHYLLIN ETHYLENEDIAMINE)<sup>6</sup>

By our experiments we were able to prove that this drug produces general vasodilation, as well as a local coronary dilation. When first administered, there was a marked drop in blood pressure, followed by a gradual rise, but not reaching the pre-injection level. Repeated injections of this drug always pro-

duced similar results. We noted also an increase in the heart rate of the dogs.

A dose of aminophyllin corresponding to a therapeutic dose increased the coronary flow for an average period of 21.6 minutes. Products bought on the market were used, and the American products were found to have, in every way, the same action as the imported ones.

#### INSULIN-FREE PANCREATIC TISSUE EXTRACT<sup>6</sup>

It has been known for some time that tissue extract has a marked effect on the circulatory system. Investigators found that insulin-free extract of the pancreas produced a transitory fall of blood pressure and a dilation of the coronary arteries of perfused rabbit hearts. A few investigators have reported that this extract had therapeutic value in some cases of angina pectoris.

We employed a commercially prepared insulin-free pancreatic extract in our experiments. This extract produced a marked but brief dilation of the coronary blood vessels in the heart-lung preparations, followed by a brief period of coronary constriction. In the intact animal, the extract produced a fall in blood pressure and, in the majority of cases, an increase in coronary flow.

We concluded from these experiments that the tissue extract is a general vaso-dilator, but that it has no specific effect on the coronary blood vessels. We have used this tissue extract with very good results in the blood vessel spasms which hypertensive persons are prone to have.

#### DEXTROSE (GLUCOSE)<sup>7</sup>

Glucose injected intravenously has become an important therapeutic procedure. Its use is so widespread, and the results so satisfactory that the literature is full of reports of beneficial results in almost any phase of therapy. So satisfactory has been its effect on the heart circulation that it is now used frequently in cardiac problems.

Our results with the substance have been most interesting. On the intact dog, under ether anesthesia, an injection of fifty per cent glucose produced a marked and sustained increase in the coronary circulation, while in the heart-lung preparation no significant change was noted. Of great importance is the fact that repeated injections of glucose on the intact animal always produced an increase in the coronary flow. Our results show conclusively that dextrose has no direct effect on the coronary vessels or nerve centers. We felt that the increased coronary flow noted on the intact animal was undoubtedly caused, to a large extent, by the increased water content of the blood.

During these experiments we tried hypertonic solutions of sodium chloride and here we found also

a thirty per cent increase in the coronary flow. An equivalent amount of hypertonic solution of glucose produced an increase of fifty-eight per cent in the coronary flow. Even though we feel that glucose is not an actual coronary dilator, we have made frequent use of this substance in coronary therapy, and find that it is most beneficial in cardiac failure and medical shock.

#### CORAMINE<sup>8</sup>

Coramine is a useful respiratory and circulatory stimulant. It is particularly beneficial in profound anesthesia narcosis and carbon monoxide poisoning. In certain cases of heart failure with respiratory disturbances, coramine has been found to be most useful.

Coramine has a dilator action upon the coronary vessels, as is noted by the marked increase in coronary flow in the heart-lung preparations. It is indeed interesting to note that, even when injected into the circulation of intact dogs, it increases the coronary flow to forty per cent in some cases, reaching the maximum in from one to nine minutes, in spite of the fact that there is a fall in blood pressure. Larger doses have a more effective response on the coronary circulation than the smaller ones. There is a definite and oftentimes sustained depressor action upon the blood pressure. This fall would tend to decrease the coronary flow, thus reducing coronary dilation.

#### METRAZOL (CARDIOZOL)<sup>8</sup>

Metrazol is used as a cardio-respiratory stimulant; however, various investigators find no appreciable variation in heart rate, in heart output, or in coronary flow; others, upon depressing the coronary mechanism of normal cats by quinidine, hemorrhage, or acid intoxication, find no beneficial effect from the use of cardiozol.

Our experimental work indicated that the coronary dilator effect is of small moment. There was a slight increase in flow which we feel was caused by the increased blood pressure. The heart showed a slight increase in rate. On the intact animal we found no definite coronary dilation. All in all, our conclusion with metrazol was that our findings do not support its use in conditions involving the coronary circulation.

#### DIGITALIS<sup>9</sup>

In view of the extensive use of the digitalis group in cardiac disease, the knowledge of its effect on the coronary circulation should be of more than casual interest. There is experimental evidence to indicate that certain members of the digitalis group decrease the flow of blood through the coronary vessels. This fact has led some investigators to advise caution in the use of this drug for certain cardiac



conditions. Other investigators have found what they thought was a dilation of the coronary vessels on account of digitalis administration. We made an extensive study of various members of the digitalis group on heart-lung preparations and on intact dogs, and found that the amount of digitalis corresponding to a therapeutic dose in the human being, in most cases, produced an immediate decrease in the coronary flow of dogs, followed by an increase in the coronary flow.

The effect of digitalis on the coronary circulation is not nearly so marked when administered to intact animals as it is when administered in the heart-lung preparations. The average of a large number of experiments indicate that there is a slight decrease in coronary flow for a period up to twenty minutes, followed by an increase which usually more than compensates for the earlier diminution in flow. Experiments on digitalized animals gave very similar results, although a similar dose of digitalis generally produced more dilation than in the non-digitalized animal.

Our results would indicate that the constrictor effect of digitalis upon the coronary circulation is not of sufficient magnitude to contraindicate its use in cardiac disease, except in those cases in which there is a very marked deficiency in coronary circulation.

#### BIBLIOGRAPHY

1. Wearn, J. T., Mettier, S. R., Klumpp, T. G., Zschiesche, Louise J.: *American Heart Journal* 9: 143, 1933.
2. Anrep, G. V.: *Lane Medical Lectures*, New York, D. Appleton Century Co. 1936.
3. Ginsberg, A. M., Stoland, O. O.: *Journal Pharmacology and Experimental Therapeutics*, 41: 195, 1931.
4. Major, R. W., Weber, C. J.: *Johns Hopkin's Hospital Bulletin*, 42: 207, 1928.
5. Stoland, O. O., Ginsberg, A. M.: *Journal Pharmacology and Experimental Therapeutics*, 49: 345, 1933.
6. Stoland, O. O., Ginsberg, A. M., Loy, D. T., Hiebert, P. E.: *Journal Pharmacology and Experimental Therapeutics*, 51: 387, 1934.
7. Ginsberg, A. M., Stoland, O. O., Loy, D. T.: *Archives Internal Medicine*, 55: 42, 1935.
8. Stoland, O. O., Ginsberg, A. M.: *Journal Pharmacology and Experimental Therapeutics*, 60: 396, 1937.
9. To be published in the near future.

## MILK AS A SOURCE OF VITAMIN G\*

W. H. Riddell, Ph.D.

Manhattan, Kansas

Last year a ten-page review with some thirty-five references endeavored to answer the question, "What is vitamin G." Until a few years ago vitamin G was thought to be a single substance. Now according to recent authority it appears that "when using the

term (vitamin G) we should have two factors in mind (1) flavins and (2) a still unidentified factor." Some call this B6, others choose to refer to it as vitamin H. In order not to confuse matters, I wish to make clear that this discussion is concerned primarily with the flavin factor. Sherman says this is vitamin G and we will continue to so label it throughout this paper. It sounds more familiar to most of us.

As concentrated from milk, from which it was first crystallized by the way, it is a water soluble substance, yellow in color with a greenish fluorescence which the chemist called lactoflavin because of its milk origin. More recently flavins having the same chemical composition and the same functions in nutrition have been isolated from other organic materials. These couldn't very well be called lactoflavin, so the term riboflavin was proposed by nutrition workers last spring to include the whole group. Riboflavin has a sugar like (d-ribose) side chain, hence the name. It is a pigment and in whey imparts that characteristic greenish yellow color. This is your vitamin G, so essential to growth and well being.

New discoveries create new uses. Products formerly considered of little value may in a short time become quite valuable. Until a few years ago most of the whey in the cheese industry was poured down the sewer. Today much of it is being saved and dried because of its vitamin G content. Poultry feeders put a high premium on it. For it seems that poultry have a high requirement for vitamin G, and milk products in poultry rations today are valued as much for the vitamin G which they contain as anything else.

Sherman has said that milk is the most important source of vitamin G in human diets today. This factor is essential to growth and adequate nutrition at all ages and appears to function as an essential factor in the oxidation processes of the animal organism. Experimental animals deprived of vitamin G show lowered vitality. Life is appreciably shortened and symptoms of old age appear much earlier. One is almost tempted to call it the longevity promoting vitamin. As the evidence becomes available vitamin G grows steadily in importance. It is measured in such small units that the common one is the gamma or microgram, which is one-thousandth of a milligram or one part in a million—infinitesimally small. In fact, it has been reported that as little as a two microgram supplement of lactoflavin (in other words, two parts in a million) was found to be sufficient to influence the rate of growth of experimental animals. But that's your vitamins—a very,

\*Presented before Certified Section, 30th annual convention, International Association of Milk Dealers, Dallas, Texas, October 22, 1937.

very little means a whole lot in terms of good nutrition.

With milk such an outstanding source, we became interested at Kansas State College in determining some things about it. Was milk a consistently good source of vitamin G and what influence did such factors as breed, stage of lactation and so forth have upon it. To some of these questions we have secured partial answers. The work has been carried on through the cooperation of the departments of Home Economics, Chemistry and Dairy Husbandry. It grew out of some of our studies on the vitamin A content of colostrum. We had been rather surprised to find samples of colostrum testing ten to twenty times as rich in vitamin A as later milk from the same cows. We decided to see if it were a potent source of vitamin G.

Several years ago a satisfactory biological procedure for testing the vitamin G content of foods was developed known as the Bourquin-Sherman method. Young rats, four weeks of age, are placed on the vitamin G free diet and depleted for two to three weeks, until their weight becomes stationary. Negative controls on the basal diet containing no vitamin G usually live for two months or more losing weight very slowly. Rats receiving the vitamin containing food show progressively rising weight curves with increasing allowances of the food over the eight week test period. Another method developed more recently by Supplee, Ansbacher and associates of the Borden Company research staff is based on the amount of fluorescence given off by the flavin (vitamin G) in solution when exposed to ultra violet light in a dark room. It is said the fluorescence of flavin is so intense in black light that the presence of as little as one part in twenty million may be determined. It is called the fluorometric method. A modification of this method developed at the Kansas Experiment Station yields results showing reasonable agreement in most instances with biological values.

As with vitamin A, the colostrum was noticeably more potent than the later milk. The samples studied averaged three times as rich in vitamin G as milk produced on the thirtieth day. After the first month there appears to be little significant change in vitamin G content, which could be attributed to advance in stage of lactation. This conclusion is based on our fluorometric studies on the vitamin G (flavin). These same measurements show the fluctuations from day to day to be large and irregular. Likewise, there appears to be little consistency in the ranking of cows with successive daily or monthly determinations. In this respect the vitamin G appears to differ from the C vitamin in milk. With the

latter, cows which rank high or low in vitamin potency of their milk hold their classification pretty much within a herd throughout their normal productive life. This is apparently not the case with vitamin G, as shown by fluorometric measurements.

Breed differences also have been observed in the college herd. In general our results show the higher butterfat breeds to have more vitamin G (flavin) in their milk. Since it is probable that most milk produced under good feeding conditions is an excellent source of vitamin G there is no occasion for emphasizing these differences.

As producers of certified milk you have a keen interest in the influence of the ration on the vitamin G in milk. Our observations do not indicate as substantial changes as have been reported for some of the other vitamins, notably vitamin A. It seems more under physiological control as is apparently the case with vitamins B and C. There is also the question of synthesis of this factor by the cow which remains to be settled. Several years ago, investigators at the Ohio station reported that cows on pasture produce milk of higher vitamin G (complex) than cows on an ordinary winter ration. Cows on a low protein (low vitamin G) ration receiving timothy hay and beet pulp also were reported as producing milk lower in this factor than cows on a good winter ration with alfalfa hay.

In our work, concerned as far as we know with only the flavin or growth promoting G, the responses have not been so marked or consistent. Last year we had a severe summer drought in Kansas. There was no pasture during the normal summer pasture season and in Manhattan we had some fifty days ranging in excess of 100 degrees. We made biological and fluorometric tests of milk collected in September about the end of the drought and also on samples collected after good pasture had been available for about one month. The pasture samples gave values approximately twenty-five per cent higher when tested biologically and about ten per cent higher according to fluorometric readings. This spring, testing before and after pasture samples, smaller and less consistent increases have been obtained. Tests have also been made on the milk of an experimental herd of Holsteins. These had been maintained in dry lot for nearly three years on a ration of prairie hay and grain with no green feed whatever. Their milk tested about as potent as that of the college Holstein herd, fed presumably a better ration. Likewise, the milk of a group of cows receiving a ration of wheat straw, beet pulp and grain from thirty days to seventy days did not lower to any significant extent in vitamin G content according to fluorometric measurements. We are not prepared to



say at this time that the ration has little effect, but in so far as our observations are concerned it does not appear to be very marked. As producers of certified milk you can be assured that your product produced under uniformly good feeding conditions is a rich and reliable source of vitamin G throughout the year.

## ROENTGEN KYMOGRAPHIC STUDY OF THE HEART\*

G. M. Tice, M.D.

Kansas City, Kansas

Until the technic of roentgen kymography was developed there was no satisfactory method of recording graphically cardiac movements. Cinematography is not an ideal method because comparison of individual plates is difficult and impractical; the same difficulties of comparison inherent in the fluoroscopic examination are present here and the process is too expensive for the average investigator. In the roentgen kymograph we have on a single film a graphic record of the movements of an organ in one plane.

The original idea of the kymograph is credited to Sabat<sup>1</sup>, a physiologist in Warsaw who did his work in 1911. Crane<sup>2</sup> of Michigan was the original American pioneer. Stumpff<sup>3</sup> of Munich devised the multiple slit kymograph of the type in common use today. Seth Hirsch<sup>4,5</sup>, Scott and Moore<sup>6,7,8</sup>, Sydney Johnson<sup>9,10</sup> and Gillies and Kerr<sup>11</sup> have in the last three or four years been attempting to popularize the procedure in this country.

We are assuming that most radiologists and cardiologists are now familiar with the procedure, so we will only briefly discuss the process of making a roentgen kymograph. For detailed description of the apparatus we would refer you to the work of Scott and Moore<sup>7</sup> or of Sydney Johnson<sup>9</sup>. The principle of the procedure is relatively easy to understand. If an x-ray beam is passed successively through the heart, a very narrow slit in a lead sheet, and onto an x-ray film, an image of the portion of the heart shadow which is projected through the slit will be recorded on the film. If, during the exposure, the film is moving downward at a uniform speed, the shadow projected will be distributed over the portion of the film moving behind the slit. The border of the heart is a moving line, consequently the shadow of the heart projected through the slit will cast an irregular silhouette corresponding to the

excursion during systole and diastole. If there are multiple slits uniformly placed, multiple moving points at uniform distances from each other along the heart contour will be projected on the plate. If the kymograph is designed according to Stumpff, with closely placed slits, the finished plate will show the general contour of the heart.

The standard grid devised by Stumpff consists of multiple lead strips running horizontally. The individual strip is 12mm. wide. The space between the strips is 0.4 mm. The grid should be so timed that it will travel 11 or 12 mm. during the exposure time. A very narrow line will then separate the exposed segments. The x-ray plate must obviously travel at right angles to the movement being recorded. On our kymograph the film moves down so that the tracing must be read from the bottom up. A very efficient kymograph is on the market and an inexpensive kymograph may be built. The most difficult part of the procedure in building the kymograph is the construction of the grid. Our apparatus is constructed, with modifications, after that described by Johnson<sup>9</sup>. The kymograph may be used in a kymoscope to reverse the process and demonstrate the pulsating heart. Our personal reaction to the kymoscope is that it is a plaything of no great practical value. Not as much can be learned from it as from fluoroscopic examination.

We are surprised, in reviewing the literature, to see how little has been written on the subject of the kymograph in this country as compared to the rather voluminous European literature. We can explain this by assuming that the procedure is not considered to be of much value by our cardiologists and radiologists; that the method is too complicated; or that work is being done, with conclusions too indefinite to justify a printed report. Certainly not enough data has been accumulated for a practical evaluation of kymography in the study of the heart. A few men are very enthusiastic, feeling that in time it will supplant the older methods of roentgenographic study of the heart. Most men are inclined to curb their enthusiasm until more evidence is obtained. It is an interesting and relatively inexpensive method of studying the heart and deserves greater attention by radiologists than has been given.

It was our hope when we began using the kymograph that it would serve to distinguish between an aneurysm and a tumor, by recording the pulsation that we cannot see with the fluoroscope. We have been disappointed in this differentiation. If there is a laminated clot in an aneurysm, the aneurysm will not pulsate and the kymograph records a nonpulsat-

\*From the Department of Radiology, University of Kansas, School of Medicine.

ing mass. (Figure 1.). In the aneurysm in which the pulsation is hammering against a thin vessel wall deficient or devoid of muscle fibers, the response as recorded on the kymograph is striking. (Figure 2.) Some investigators feel that they can detect in every case the difference between transmitted and expansile pulsation. With our brief experience we do not feel competent as yet to make this distinction. A group of Russian investigators feel that differential diagnosis between tumor and aneurysm is of little or no value; while Bickenbach<sup>12</sup> of Munich consider it of decisive importance.

Hirsch<sup>4</sup> has described the tracings over the various cardiac chambers as characteristic. If this is true it will be possible to more accurately locate the boundaries between the chambers for purpose of measurement. Wave form may

be studied and something may be learned of the forces controlling the type of wave. Lack of a normal wave form is considered to be an indication of myocardial disease either localized as in an infarct or generalized as in myocarditis. Generalized decrease or absence of pulsation is a relatively characteristic finding in pericarditis. Arrhythmias will be detected if the irregularity occurs during the short interval of exposure. It may not be possible to tell from the kymograph the type of arrhythmia.

Stumpff<sup>14</sup> distinguishes broadly between two types of movements along the left ventricle, which he considers of pathological significance. Type I is considered to be characteristic of the normal heart. In this type the most forceful impulse is seen at the apex. The left ventricle showing the greatest pulsation in the basal portion is called a type

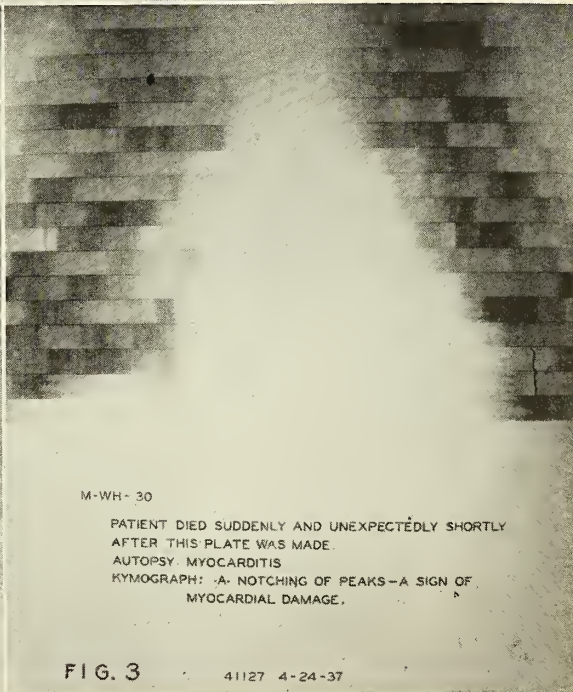
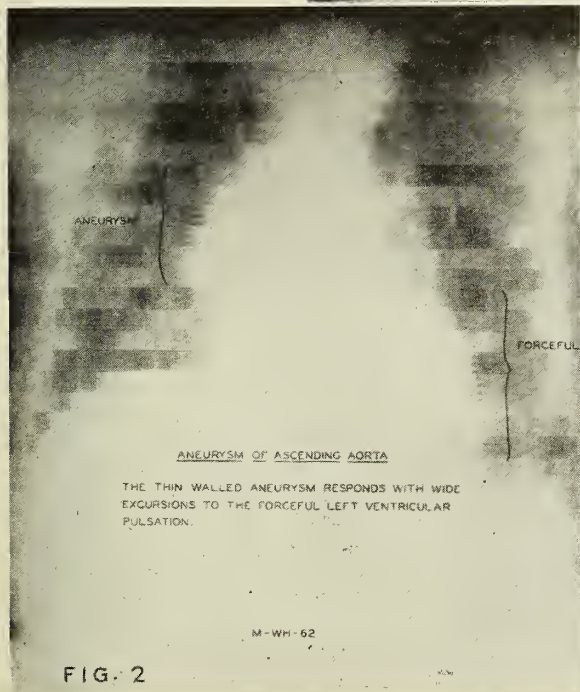
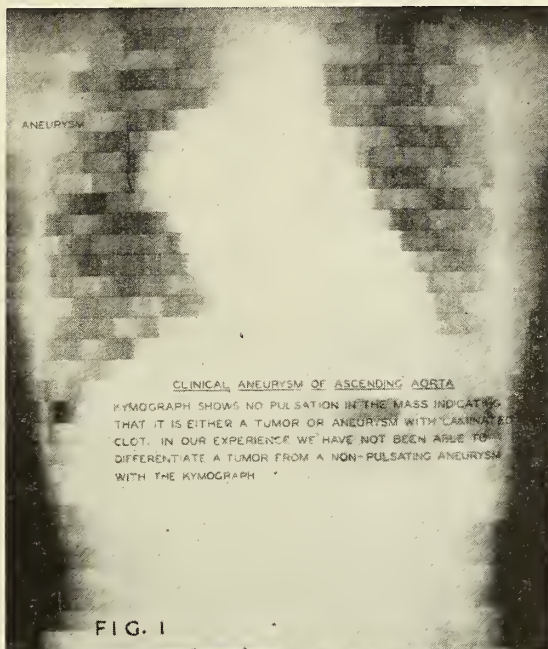


Figure 1. Aneurysm of the Ascending Aorta. The Roentgen kymograph records no pulsation indicating the presence of a laminated clot in the wall.

Figure 2. Aneurysm of the Ascending Aorta. There is

marked excursion of the vessel wall indicating loss of muscle tone.

Figure 3. Myocardial Damage. A notch in the peak of the wave is considered to be usually evidence of myocardial damage.



II heart and is considered by him to be usually a pathological heart. He stresses the fact that this is not always true, as he has observed hearts that were considered to be quite normal showing type II pulsation. Faber and Kjaergaard<sup>15</sup> report that of fifty normal hearts examined type II was not encountered once. They conclude, as does Stumpff, that most type II hearts are pathological. From a study of 1700 kymographs these authorities make definite conclusions about various pathological types. In aortic regurgitation the kymograph shows long winding, pointed aortic waves. The ventricular waves are greater than normal. In aortic stenosis the movement of the aortic waves are quite minimal. The left ventricle is large but the waves may be small and type II waves may be seen over the left ventricle. Their description of the findings in mitral stenosis is not convincing.

In our brief study of these plates we are impressed with the findings in myocardial damage. We have seen three cases come to autopsy in which the kymograph shows a small notch on the peak of the ventricular wave. All of these cases showed myocarditis. The most striking case of this type was that of a young man who died suddenly the day after the kymograph was made. (Figure 3.) From the notched peaks myocardial damage was diagnosed.

This was verified at autopsy. Chronic myocarditis usually shows the type II pulsation. Chronic passive congestion results in a kymograph in which moving shadows of the smaller arteries are recorded out a distance into the lung field. The fallacy of taking a chest plate in 0.5 second rather than a very rapid exposure is illustrated by a kymograph of this type. The pulsating small blood vessel or the transmitted pulsation recorded in the adjacent lung tissue visualized on the kymograph will be visualized as a hazy poorly defined shadow on the routine chest plate exposed with the same technic.

When a portion of heart muscle stops functioning because of an infarct, (Figure 4) no pulsation will be recorded over a small segment on the kymograph. If an aneurysm of the heart wall occurs, theoretically the sac will show paradoxical motion to the normal heart wall adjacent.

Dr. Sydney Johnson<sup>10</sup> has pointed out the fact that determination of cardiac output has not been given the place it deserves in clinical medicine. He has compared in a small series of cases what he chooses to call the Roentgen Kymographic Index as compared to the stroke volume determination made by the dye injection method. He calls attention to the errors of measurement inherent in the kymographic method. His figures derived from the

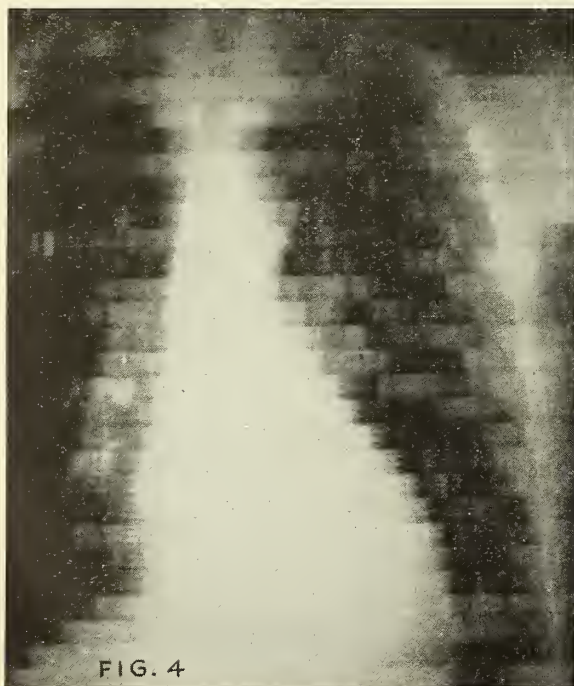


FIG. 4

Figure 4. This patient had a clinical diagnosis of coronary occlusion. The Roentgen kymograph shows no pulsation in the lower three frames corresponding to the apex of the heart. A diagnosis of infarct was made.

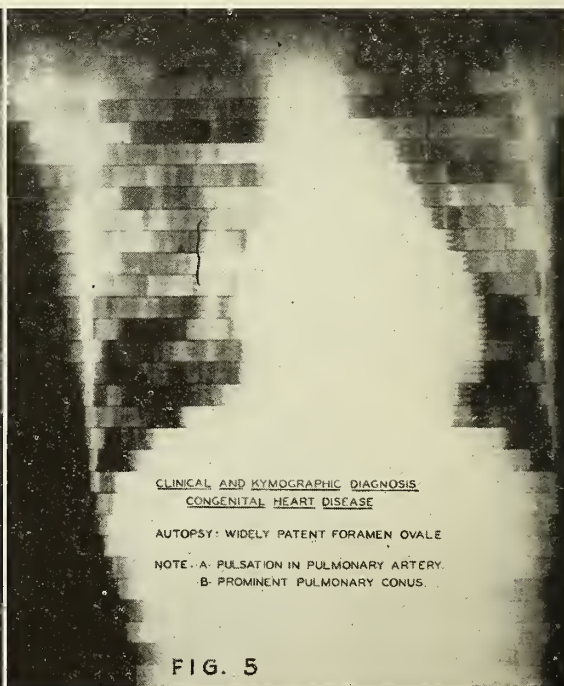


FIG. 5

Figure 5. Congenital Heart Disease. Shunting of the systemic circulation into the pulmonary vessels results in pulsation of a branch of the right pulmonary artery.

kymographic study of the excursion of the left ventricle are remarkably similar to the stroke volume determination by the dye method when the heart movement is not restricted by pericarditis and when there are no defective valves. Dr. Johnson concludes that in selected cases the kymographic index should parallel beat output.

### CONCLUSION

Movement of the heart is altered by disease of the myocardium, pericardium, or valves and occasionally by changes in rhythm. The appearance of the normal kymogram has not been definitely established. The value of the kymogram in clinical medicine will depend on our accuracy in recognizing the normal; then in evaluating the abnormal kymogram and assigning abnormal tracings, if possible into pathological groups. In a few instances the kymograph should be of value in establishing a difficult and obscure diagnosis. One group of authorities expresses the opinion that the method will rank along with electrocardiography in the study of the heart. We doubt if this will ever be true. The two methods in no respect should come into competition with each other. The kymograph is a method of studying the actual movement of the heart in the lateral plane which the electrocardiograph is a study of electrical response of heart muscle. When we see the great advance that has been made in interpreting the electrocardiograph in the last few years, we can expect that with many investigators studying the kymograph it will become a valuable procedure in diagnosis of cardiac pathology.

### BIBLIOGRAPHY

1. Sabat, B.: Über ein Verfahren der roentgenographischen Darstellung der Bewegungen des Zwerchfells des Herzens der Aorta. *Polnischen med Wchnschr.* "Lwowski Tygodnik Lekarski." July, 1911, Nr. 28, 4.
2. Crane, A. W.: Roentgenology of the Heart. *American Journal of Roentgenology* 1916, 3, 513.
3. Stumpff, P.; Weber, H. H.; Weltz, G. A.: Roentgenkymographische Bewegungslehre Innerer Organe: George Thieme, 1936.
4. Hirsch, I. S.: The Examination of the Heart by the Roentgen Kymographic Method. *The British Journal of Radiology.* Vol. VII, No. 84, Pg. 728-754, December, 1934.
5. Hirsch, I. S.: The Application of Kymoroentgenography to the Diagnosis of Cardiac Disease. *Radiology*, Vol. XXIII, Pg. 720-737, 1934.
6. Scott, Wendell G. and Moore, S.: Roentgenkymography: Its Clinical and Physiological Value in the Study of Heart Disease. *Annals of Internal Medicine*, Vol. X. No. 3, Pg. 306-329, September, 1936.
7. Scott, W. G. and Moore, S.: The Construction of Roentgen Kymograph and Kymoscopes. *Radiology*, 1936, XXVI, 622-629.
8. Scott, W. G., Moore, S., and McCordock, H.: Roentgenkymographic Studies of Cardiac Conditions. *Radiology*, Vol. 28, No. 2, Pg. 196-210, February, 1937.
9. Johnson, S. E.: The Roentgenkymograph as a New Aid in the Diagnosis of Adhesive Pericarditis. *Surgery, Gynecology and Obstetrics*, 1935, LXI, 169-174.
10. Johnson, S. E.: Roentgen Kymography Considered in Relation to Heart Output and a New Heart Index. Vol. 37, No. II, Pg. 167-174, February, 1937.
11. Gillies, C. L. and Kerr, H. D.: Roentgen Kymography of the Heart and Great Vessels. *American Journal Roentgenology and Radiation Therapy*, 1936, 35, 640-644.
12. Holst, Leopold; Klioner, I.; Kopelman, S. L.; Speranskij, N.: *Fortschr., a. d. Geb. d. Roentgenstrahlen* 51: 454-469, May, 1935.
13. Bickenbach, O.: *Fortschr., a. d. Geb. d. Roentgenstrahlen* 50: 14, August, 1934, translated—*Year Book Radiology*, 1935, Pg. 171.
14. Stumpff, P.: X-Ray Kymography of the Heart. *The British Journal of Radiology.* Vol. II, No. 84, Pg. 707-727, December, 1934.
15. Faber, Borge and Kjaergaard, Hans: X-Ray Kymograms of Normal and Pathological Hearts. *British Journal of Radiology.* Vol. IX, No. 101, Pg. 335-344.

## EDUCATIONAL REQUIREMENTS FOR PHARMACISTS\*

L. D. Havenhill, Ph.M.†

Lawrence, Kansas

In the early days in this country, the physicians as well as the pharmacists received what training they possessed in these fields in Europe. Just when they began to receive preparation for their respective callings in this country is not known to me. But I do know that it was an apprenticeship proposition for the pharmacist as well as for the physician. The prospective medico generally began as stable boy and horse-and-buggy chauffeur for some physician of his or his parents' choice and after several years' work, reading, and observation, by easy stages he became a full fledged physician.

So also the future pharmacist after the completion of an apprenticeship with some druggist of his or his parents' choice eventually, after years of candle and lamp trimming, window and bottle washing, and floor scrubbing, with occasional diversion by the way of the mortar and pestle, drug mill, percolator, and pill tile, became a pharmacist.

Some of these early indentures of apprenticeship are very interesting. I have in mind one which I think the pharmacists will enjoy by way of contrast with the requirements imposed upon their present day unregistered help. This reads as follows:

### THIS INDENTURE

WITNESSETH, That John Hart, son of Seymour Hart, of the Northern Liberties of the City of Philadelphia, Hath put himself and these presents with the advice and consent of his father—doth voluntarily and of his own free will and Accord, put himself Apprentice to Townsend Speakman, of the City of Philadelphia, Druggist, to learn his Art, Trade and Mystery, and after the manner of an apprentice to serve him, the said Townsend Speakman, from the Day of the Date hereof, for, and during, and to the full end and term of six years, five months and Eleven Days next ensuing. During all which Term the said Apprentice, his said Master shall serve, his secrets keep, his lawful commands everywhere readily obey. He shall do no Damage to his said Master nor see it to be done by others without letting or giving notice thereof to

†Dean of the School of Pharmacy, University of Kansas.

\*Presented before the Douglas County Medical Society January 4, 1938 in a joint meeting with the practicing pharmacists of Douglas County and the educational staff of the School of Pharmacy of Kansas University.



his said master. He shall not waste his said master's goods, nor lend them unlawfully to any. He shall not commit Fornication, nor contract matrimony within the said Term. He shall not play at cards, Dice or any other unlawful Game, whereby his said master may have Damage. With his own Goods, nor with the Goods of others, without license from his master he shall neither buy or sell. He shall not absent himself Day nor Night from his said Master's service without his Leave: Nor haunt ale houses, Taverns, or Playhouses; but in all times behave himself as a faithful Apprentice ought to do, during the said term. And the said Master shall use the utmost of his Endeavour to teach or cause to be taught or instructed the said Apprentice in the Trade and Mystery of a Druggist. And for the true Performance of all and singular the covenants and Agreements aforesaid, the parties bind themselves each unto the other, firmly by these Presents.

IN WITNESS Whereof the said parties have interchangedly, set their Hands and Seals hereunto. Dated the Twenty-eighth Day of the First Month, Annoque Domini, One Thousand Seven Hundred and Eighty-two.

Sealed and Delivered in the presence of

LEONARD SNOWDON

SAMUEL CARVER

TOWNSEND SPEAKMAN (Seal)

JOHN HART (Seal)

\* \* \*

The apprenticeship system was the customary procedure for many years. However good as this system was for the art of pharmacy, it was early recognized that the science of pharmacy as well as the art played a necessary part in the training of a pharmacist—that a trained mind as well as a trained hand was essential. To correct this defect the pharmacists of Philadelphia decided to introduce a course of lectures at which attendance of the apprentice was required, charges paid by the Master and this was eventually made a part of the indenture.

The outgrowth of this course of lectures was the establishment of the Philadelphia College of Pharmacy in 1821.

The establishment of this school was followed a few years later by the Massachusetts College of Pharmacy, 1823, and by the New York College of Pharmacy in 1829—all good schools of their kind at that time, but as was the case with the early medical schools, many of the schools of pharmacy subsequently established were of varying degrees of efficiency. You medical men know what happened to many of these medical schools in the early years of the twentieth century. A similar drastic step is just getting under way among the schools of pharmacy.

With the increasing numbers of pharmacy schools, more preliminary schooling was emphasized and less time was correspondingly required in apprenticeship. Apprenticeship is legal in Kansas but I do not know of any Kansas druggist who obtained his preliminary pharmaceutical training by this drastic method.

The changes in the requirements for Kansas pharmacists follow in general that of the older states; namely, first a pharmaceutical association, then a pharmacy law and a state board of pharmacy, then a course of lectures developing into a School of Pharmacy. The Kansas Pharmaceutical Association was organized in 1880. The pharmacy law was obtained in 1885, and largely through the efforts of the chairman of the legislative committee, the late George Leis, a manufacturing pharmacist of Lawrence (Leis Dandelion Tonic), a chair of pharmacy was provided for at the University of Kansas in 1885 which in 1891 became the School of Pharmacy.

The preliminary educational requirements were the three R's, reading, riting, and rithmetic. The term was of two years duration. A four-year course was added for 1896 and a three-year course in 1900. The admission requirements were gradually increased through grade graduate or equivalent to one year of high school in 1911, two years high school in 1912, three years in 1913 and four-year high school graduation, the present requirement, in 1914. The graduation end was extended to a three-year minimum in 1925 and a four-year minimum, the present requirement, in 1932.

Important national steps that have been instrumental in increasing the educational requirements of pharmacists were:

Establishment of the U.S.P. in 1820; the A.Ph.A. in 1852; the American Association of Colleges of Pharmacy in 1900 whose purpose is to promote pharmaceutical education and research; the National Association of Boards of Pharmacy in 1904 whose purpose is to provide interstate reciprocity in pharmaceutic licensure, based upon a uniform minimum standard of pharmaceutic education and uniform legislation.

One state in the union—Virginia—has discontinued the apprenticeship system, all preparation being given in the college of pharmacy. Most states, like Kansas, retain one year of the apprenticeship idea under the guise of practical experience. And one state, Massachusetts, still has no educational standard beyond the four years of practical experience and the passing of an examination satisfactory to the State Board of Pharmacy.

The standard college course in pharmacy at the present time is based upon the fourth edition of the Pharmaceutical Syllabus and is adhered to more or less closely by the member schools of the A.A.C.P. These, fifty-four in number, represent roughly three-fourths of the pharmacy schools in the United States. The syllabus requires the completion of a total of 3200 clock hours rather than credit hours of instruction and is based upon a four-year standard

high school preliminary or equivalent. Not less than 1360 hours shall be didactic and 976 hours laboratory, which include the basic subjects of botany, chemistry, economics, English, mathematics, and physiology, and the professional subjects of bacteriology, pharmaceutical chemistry, pharmaceutical arithmetic, dispensing pharmacy, history of pharmacy, pharmaceutical jurisprudence, Latin of Pharmacy, operative pharmacy, pharmaceutical technique, theory of pharmacy, pharmacognosy, pharmacology, and public health studies together with sufficient additional work in accounting, bioassaying, merchandising, advertising, salesmanship, biochemistry, inorganic and organic pharmaceutical chemistry, manufacturing pharmacy, microscopic pharmacognosy, German or French, physics, and zoology to complete the minimum 3200 clock hours of instruction.

The American Council on Pharmaceutical Education, established in 1932, the objects of which are: To formulate the educational, scientific and professional principles and standards which an approved school or college of pharmacy will be expected to meet and maintain. It is composed of representatives from four national organizations—American Pharmaceutical Association, National Association of Boards of Pharmacy, American Association of Colleges of Pharmacy, and American Council on Education as advisory. This council is now actively functioning and the various pharmacy schools will soon be officially rated as class A, B, C, etc. This classification will be used by the N.A.B.P. as a basis for reciprocal registration and will be of use to the various state boards of pharmacy to answer the question of what is an accredited school of pharmacy.

From this hasty sketch of the progress in educational requirements of pharmacists, it is evident that regardless of whatever else the pharmacist may be, he is entitled to be classed as a professional man.

## SALIVARY CALCULUS OF WHARTON'S DUCT

W. W. Reed, M.D.

Topeka, Kansas

The following case of salivary calculus of Wharton's duct, is of interest; first, because of its unusual size; second, either its rapid formation, or the lack of symptoms prior to the two weeks before the patient was seen.

J. J. C., age sixty-two, male, came into the office, complaining of a sore throat with dysphagia which

had existed for two weeks, and followed one week after an acute upper respiratory infection. Pain and soreness extended from the left side of the floor of the mouth and throat into the left cervical region. He described a purulent drainage with foul odor the last three or four days. There was nothing of note in the family history excepting that one uncle died from cancer. On examination there was a boggy swelling in the left submaxillary gland, no other adenopathy. The pharynx was somewhat injected as a result of his recent acute pharyngitis. There was an indurated swelling three or four centimeters in

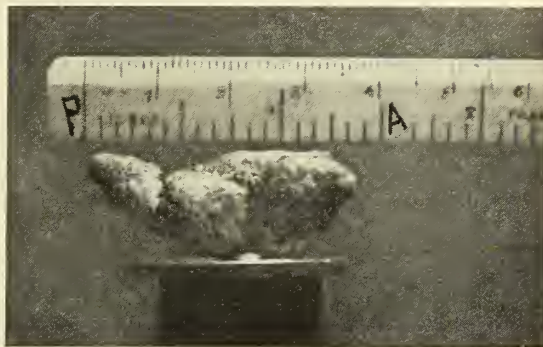


Fig. 1. Salivary Calculus of Wharton's Duct.

length in the floor of the mouth on the left side; pus could be expressed from the salivary duct openings. At the posterior border of the mylohyoid muscle, the head of the submaxillary gland was quite tender on pressure. Because of the size of the calculus an x-ray was made, which gave the impression that the apex of the stone was, almost, if not quite, separated from the base. Under local anaesthetic the stone was removed in one piece and the duct was closed with catgut sutures.

National Laboratory, Chicago, distributor of "Nuga-Tone," a tablet alleged to be a remedy for various diseases, has been ordered by the Federal Trade Commission to stop certain false representations concerning its product. The Commission found that Nuga-Tone is a dangerous mixture containing three fatal poisons, namely, strychnin, corrosive sublimate, and arsenic, the presence of none of which was disclosed to the purchaser.—Better Business Bulletin, November 11, 1937.

At a recent conference of pediatricians where fatal acute enteritis among new born infants was discussed, Dr. H. N. Bundesen, president of the Chicago board of health, stated that none of the babies who died in the recent outbreak had been breast fed from the beginning. The breast feeding of infants therefore is still an important item of infant care.—The Nebraska State Medical Journal, January, 1938.



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

The attendance of the 79th Annual Session at Wichita, Kansas, was the greatest in the history of the Society.

Only praise can be given for committees in arranging the well balanced program, and still more praise for our hosts—the Sedgwick County Medical Society, for their tireless efforts and wonderful courtesies. They should be especially commended for the Hall of Health; it was undoubtedly a step in the right direction.

The marked interest in the Council, House of Delegates, and committees, was indicative of the desire to live up to the high ideals of organized medicine.

Under the leadership of Dr. J. F. Gsell and his well functioning committees much has been accomplished, and the cooperation with the State Board of Social Welfare of Kansas and the Kansas State Board of Health, has been most satisfactory and advantageous to the Society.

With the advent of the various social security programs, legislative and litigation problems, in my opinion, it would have been next to impossible to function efficiently without the office of a full-time executive secretary.

I am sure the entire membership is most appreciative of the fine work done by Mr. Clarence G. Munns.

The membership of the Society I feel sure is anxious to carry on, to a satisfactory conclusion, all unfinished problems and take on the new ones that may arise.

We, the officers, ask your indulgence, welcome your constructive criticisms, and your assistance, and trust that we shall have another successful year.

N. E. Melencamp, M.D., President.

---



---

## EDITORIAL

---



---

### THE PRESIDENT-ELECT

The Journal desires to pay tribute to the selection of Dr. C. C. Nesselrode of Kansas City as President-Elect of the Society for the year 1938-39 and as President for the year 1939-1940.

Dr. Nesselrode has served the Society in many official capacities and particularly as Chairman of the Committee on Control of Cancer since 1915. The fact that Kansas has a program on the latter subject which is said to be one of the most extensive in the United States, is due largely to the efforts of Dr. Nesselrode. In addition to Fellowship in the American Medical Association, he is a member of the Western Surgical Association, a Fellow of the American College of Surgeons, and a member of the staff of the University of Kansas School of Medicine. His experience in Society work and his general and executive ability, equip him well to accept the important responsibilities incidental to the above offices.

---

### THE A. M. A. MEETING

The meeting of the American Medical Association to be held in San Francisco from June 13 to 17 will present a real opportunity for scientific betterment to every physician in the United States.

Every Kansas member who can possibly do so, owes it to himself to attend this meeting.

If you have not already done so, make your reservation and plan to go to San Francisco.

---

### ANNUAL SESSION

The 79th Annual Session was undoubtedly one of the most successful the Society has ever held.

The total registration of 1011 exceeds all past records and displays well the interest Kansas physicians have in scientific advancement and in medical organization.

The forty technical and the thirty-five scientific exhibits were also the largest in number that the Society has ever presented. Many technical exhibitors

stated that the meeting was one of the best they had ever attended.

The annual banquet was attended by approximately 750 members, wives and guests and the program was apparently enjoyed by every one.

The scientific program was complete in every respect and was ably presented.

Sedgwick County Medical Society is due much commendation for its successful presentation of the Hall of Health. This function, which has been attempted only once previously and in a much larger city, was an undertaking of great magnitude. The completeness of exhibits, their attractive presentation and the fact that 30,000 people viewed the display are self indicative of the success attained. It is also interesting that the House of Delegates was impressed with the lay educational possibilities of this project to the extent that the Society delegates were unanimously instructed to recommend to the American Medical Association that it sponsor or present similar Halls of Health in all parts of the country.

Both sessions of the House of Delegates were well attended and several actions of importance were announced. New officers elected were as follows: C. C. Nesselrode, M.D., Kansas City, President-Elect; H. L. Chambers, M.D., Lawrence, Secretary; Geo. M. Gray, M.D., Kansas City, Treasurer; F. L. Loveland, M.D., Topeka, First Vice-President; G. I. Thacher, M.D., Waterville, Second Vice-President; J. L. Lattimore, M.D., Topeka, Councilor for the Fourth District; Marion Trueheart, M.D., Sterling, Councilor for the Fifth District; A. C. Armitage, M.D., Kinsley, Councilor for the Eleventh District; H. L. Snyder, M.D., Winfield, American Medical Association Delegate 1938-1939; O. P. Davis, M. D., Topeka, Chairman Emeritus of the Medical Defense Board; L. S. Nelson, M.D., Salina, Chairman, Medical Defense Board; James D. Bowen, M.D., Topeka, Medical Defense Board; R. B. Stewart, M.D., Topeka, Editorial Board; and Don C. Wakeman, M.D., Topeka, Editorial Board.

Sedgwick County Medical Society may take pride in its efficient and successful handling of the 1938 annual meeting.



## ORGANIZATION TRENDS

County medical societies a few years ago were loosely knit organizations holding one monthly meeting. Interest in county society affairs then depended upon the personality of the secretary and his ingenuity in arranging programs that would bring out the attendance. A definite change has come about. Many county societies now have a full time secretary. He is usually a layman with business training and a business view point. Offices are maintained for the administration of the various enterprises of the organization. These may include the operation of a credit bureau through which the collections of the members may be facilitated. Various types of financial services are being conducted. In addition to departmental activities devoted to the business of medical practice there is a tremendous increase of interest in committee work. For instance public relations committees have become alive to the necessity of a more intimate contact with the public through programs of lay education.

In the larger centers medical organization has taken on new zest in the promotion of post-graduate assemblies. Throughout the "trade territory" physicians are attracted to short post-graduate courses, lectures, clinics and demonstrations for the purpose of attracting "business" into these medical centers.

This is all legitimate business enterprise. It has its good points in stimulating scientific interest and in binding physicians into closer relationship. Efforts to educate the public in preparation for the acceptance of scientific medicine are highly necessary.

It is time however to raise the question of what is really behind all of this increased activity. If it is basically business enterprise is it not too closely related to the usual Chamber of Commerce conception of business? Individual members of organized medicine and officers should turn introspective for the purpose of evaluating their efforts toward more efficient organization in the light of medical ideals.

It has become more difficult to make money in the practice of medicine because of the prolonged financial depression. It is primarily on account of

this that retrenchment has become the trend in medical organization.

The question arises, is the medical profession actually advancing or is it shifting to a more business-like view point? There can be no doubt that emphasis has changed.

History teaches that medical ideals are derived from the public. Social pressure upon the medical profession determines its group thinking and its position in relation to the public.

The profession is being forced into more intensive effort to maintain its economic well being. This results in the increased emphasis on organization. Social pressure also exacts certain requirements which cannot be fulfilled through an increase in business efficiency.

There is a real danger that organization may develop to the point where business may submerge scientific interest and professional ideals.

---



---

## CANCER CONTROL

---



---

### CANCER OF THE THYROID

Alfred O'Donnell, M.D.

Ellsworth, Kansas

In order that treatment of these grave conditions may be successful, removal of the growth must be attempted before it has reached a point at which positive diagnosis can be made.

The frequency of malignant disease in the thyroid makes it important that tumors of this gland should be removed. This must mean the removal of benign as well as malignant growths, for to wait for the purpose of clinical differentiation is to delay too long. A thyroid gland which continues to enlarge steadily after puberty should be suspected of malignancy; and an enlargement beginning and steadily continuing after middle life should suggest carcinoma and be removed. Fetal adenoma is a common precancerous lesion; some authors state that ninety per cent of thyroid carcinoma has its origin in such growths. Operation before the capsule has become involved is imperative.

The reported incidence of malignant disease of the thyroid gland varies in different communities; it is higher in goiterous regions than in non-goiterous regions. Wegelin gave the high incidence

in Berne of carcinoma of the thyroid gland in one in every ninety-six postmortem examinations, while in Berlin it was one in 1033 and in the United States one in 928. Christopher states—that among patients operated on for goiter, the frequency of carcinoma of the thyroid gland as compared with all benign nodular goiter is about 2.5 to three per cent, while compared with all benign goiters the average is about one per cent. The disease is more frequent among females in the proportion of two to one. The age incidence of the disease corresponds closely with that of malignancy of other organs; sixty-nine per cent of the patients are within the fourth, fifth and sixth decades of life; about three per cent of the patients are in the first and second decades of life.

From the histories of patients who have malignant disease of the thyroid gland, the evidence shows that in from eighty to ninety per cent of the cases the malignancy developed in a preexisting benign goiter; occasionally, however, it develops in a non-goiterous gland and very rarely in the hypertrophic gland of exophthalmic goiter.

Hull states, a study of the recent reports from large clinics show that carcinomata of the thyroid comprise four to six per cent of all tumors of the thyroid gland and 1.6 to 2.8 per cent of all thyroids removed at operation. These figures are the results of a review of over 2,500 cases of thyroid malignancy as reported by various authors.

The average age of the patient affected is fifty years, though there is wide variation as to age. Ewing reports two cases of carcinoma in children under five and Cathell cited three cases, aged thirteen years and under, all of which were of the fetal adenomatous type. In the present group of nine cases, the youngest patient is twenty-two, the oldest sixty-one.

Clinical diagnosis of thyroid cancer is difficult, except in late cases. Pemberton states that clinical manifestations of malignancy are present in only fifty per cent of the operable cases.

The presenting cancer may be hard or soft, smooth or nodular, unilateral or bilateral, single or multiple, in a patient of any age and still may not be different from simple, cystic or calcified types of adenomata.

In late cases, when the growth has invaded the capsule, the lesion usually presents a unilateral, hard, irregular, nodular, fixed mass, with palpable cervical glands, associated with pain, hoarseness, dysphagia, dyspnoea, cardiac palpitation and loss of weight.

One of the most common early symptoms is the rather sudden increase in size of an existing goitre.

Thus clinical diagnosis is difficult, and, as has been cited, cancer of the thyroid may occur at any age; but, since two to six out of every 100 patients with

thyroid enlargements or tumors develop cancer, it would seem justifiable, in light of the present day low operative mortality, to advise operation. At least the danger should be fairly presented to the patient.

Brenizer states that any and every nodular goiter which is showing increase in growth and any and every diffuse goiter showing diffuse hardness or areas of hardness should be removed, regardless of the condition of thyrotoxicemia.

The outlook, in summing up, is encouraging, particularly, in adenocarcinoma, which does not arise from tumorous tissue and in papillary carcinomata and malignant adenomata occurring in nodular goiter, because these tumors are slow in development and give an opportunity for early removal; they metastasize late and are radio-sensitive.

Brenizer has reported seventeen cases of papillary carcinoma, and malignant adenoma and a case of adenocarcinoma diffuse in one lobe, well for twenty-three to two years.

Conclusions of different authorities are as follows:

The ratio of cancer to thyroid tumors is four to six to one hundred, 4-6:100.

The incidence of cancer in thyroid specimens is 1.6 to 2.8 per cent.

Cancer occurs more frequently in women than in men.

Thyroid cancer is most common in the fifth decade.

Pre-existing adenomata give rise to ninety per cent of epithelial malignancies of the thyroid.

It seems justifiable to advise excision of any thyroid tumor since four to six patients out of 100 may develop cancer.

Simple colloid and exophthalmic goitre rarely give rise to cancer.

Metastases occur by blood vessels and lymphatics and are most common to the lungs and bones.

The best treatment is surgical excision combined with irradiation.

The prognosis is fair with forty to fifty per cent five-year cures following treatment.

#### TWENTY-FOURTH AMGA TOURNAMENT

The Twenty-Fourth AMGA Tournament will be held at the San Francisco Golf and Country Club in San Francisco, California, on Monday, June 13, 1938. The hours for teeing off will be at 7:30 a.m. and 2:30 p.m. and a dinner will be held at the club house at 7:00 p.m. where all prizes will be awarded. No prize or trophy will be given out unless the winner is present. Fifty beautiful trophies and prizes will be awarded and the cost of \$7.00 covers green fees, dinner, tournament fee, refreshments and prizes. Handicaps are to be presented at the first tee and no handicap over 30 will be accepted. Foursomes will be arranged on request and further information about the tournament may be secured from Mr. Bill Burns, Executive Secretary, 2020 Olds Tower, Lansing, Michigan.



---

## EYE, EAR, NOSE & THROAT

---

### TONSILLAR AND PERITONSILLAR INFECTIONS

Hal Marshall, M.D.

Wichita, Kansas

An apology may be due for a discussion of tonsillar and peritonsillar infections and their complications. It is a relatively simple subject and, it may be said particularly by the more fortunate, that complications are comparatively infrequent. Yet in view of the fact that peritonsillar infections are so common, it must follow that serious complications or even fatalities resulting from these infections should be regarded as even more tragic than complications resulting from less common and more serious diseases. By this is simply meant that the surgeon who loses a patient following a perforated peptic ulcer is not placed in the uncomfortable position of the doctor whose patient may succumb as a result of a peritonsillar abscess or some complication following it. Such cases may be rare, yet that makes them none the less tragic.

Another excuse may be offered for the choice of this subject and that is the age-old fact medical history records, that many a physician's desire to know more about a given disease has been aroused and stimulated by one or more experiences with patients having that disease,—particularly if the ultimate outcome of some of these cases has been disastrous or appalling. It is possible that this disease is not truly understood and its possibilities not entirely appreciated by the average doctor, including some otolaryngologists perhaps, and it is hoped that an appreciation may be here aroused while the writer leans on the teachings of master thinkers and openly disclaims any originality for himself.

As pointed out above tonsillar and peritonsillar infections are relatively common. Aside from being most painful and distressing maladies, they have come to be regarded as benign and self limited afflictions. Yet we must admit that there are few local acute infections in which suffering is more intense and which, in so short a time, will render the patient more helpless than do these infections. Any reader who may have had the personal experience will agree that the convalescence following any major surgical procedure is insignificant in comparison to the suffering accompanying a peritonsillar abscess.

A review of the anatomy of the palatine tonsil minutely given would probably interest the average

doctor about as much a description of the minute anatomy of the inguinal canal would interest the otolaryngologist. Still we should all remember that the palatine tonsil lies in the tonsillar fossa. This tonsillar fossa is limited anteriorly by the anterior pillar which includes the palatoglossus muscle, and posteriorly by the posterior pillar including, among other structures, the palatopharyngeus muscle. Laterally or externally the limit is the superior constrictor muscle of the pharynx. Finally we mention the capsule and the loose areolar tissue separating it from the lateral muscular limitation mentioned above, and the triangular area at the upper pole formed by the junction of the pillars and the upper pole of the tonsil. Here in this supratonsillar space a large percentage of peritonsillar infections localize.

Pathologically speaking peritonsillar infection presupposes a bacterial infection in the tonsil or a remnant of tonsil tissue. The infection spreads to the capsule and through it and into the space where further spread is limited by the muscular wall laterally. The products of the infection dissect the tonsil and its capsule from its bed and push it toward the median line. In the average case, the pus finds its way to the supratonsillar space where there is sufficient space for its collection and expansion. In such a case inspection reveals the usual swelling of the palate, the tonsil is pushed medially, the soft palate is an angry, red and bulging mass and the uvula is edematous and pushed beyond the mid-line.

Occasionally the pus may dissect posteriorly and inferiorly displacing the tonsil forward. The findings mentioned above may be absent and forceful depression of the tongue may be necessary to disclose the seat of the abscess. One symptom of this type of abscess is the extreme difficulty in swallowing which occurs early and is out of all proportion to the pathology evident in the pharynx on examination. Another type of abscess is formed when the pus finds the space laterally or externally and does not find its way to the supratonsillar fossa. The swelling may develop more slowly in these cases and finally appears at about the middle or lower one-third of the anterior pillar. It may extend forward toward the last molar tooth. A distinctive feature of this type of abscess is the inability of the patient to open the mouth and, occasionally, the difficulty of locating pus.

More rarely perhaps the pus finds its way through the superior constrictor muscle of the pharynx and localizes in the lateral pharyngeal space. Here the pus is deep-seated and difficult to approach. In this location, the pus may find a route to the mediastinum, or because of its relation thereto, it may involve the deep muscles of the neck. Finally there

is a type which may assume any and all forms or combinations of these, and that is the abscess occurring subsequent to previous attacks in which one or more incisions may have been made. The location and depth of incision or incisions may change the entire picture of the migration of pus in these cases. Since the scar tissue may anchor the tonsil to its bed there may be an absence of the usual displacement of the tonsil medially and there is a tendency for deeper localization of the pus. Such abscesses may be extremely dangerous. Incision and drainage of pus on one side of a mass of scar tissue may give relief for a time, but with the return of discomfort the examination may show an abscess localizing on the opposite side of the mass of scar tissue.

As absurd as it may seem a few remarks relative to the symptoms of peritonsillar abscess will be made here. In general it may be said that the severity of the symptoms may depend on the mental or neurological make-up of the patient himself, on the location of the pus, on the virulence of the infecting organism, and occasionally whether or not the infection is recurrent. The classical case will present a patient who looks ill. Swallowing is invariably painful. Observe the patient while he swallows. The pharyngeal gymnastics are usually typical. There is usually agonizing pain radiating to the ear of the affected side and to that side of the head. Respiration may be disturbed, the mandible is immovable, the tongue coated, the breath foul smelling, saliva drips from the mouth, the voice that of the forty-eight hour post-tonsillectomy patient and the patient is usually willing to agree to submit to any possible proposal of the doctor that may bring relief.

It need not be said that prompt relief follows spontaneous rupture or adequate incision or tonsillectomy. The anesthetic, the instruments employed and the technic will all probably vary in direct proportion to the number of those of us who perform such operations. In the majority of cases what we may call local anesthesia is used, because peritonsillar abscess is less commonly seen in children.

Our familiarity with the more frequent and ordinary complications of tonsillar and peritonsillar infections justifies their intentional omission here. One of the most serious complications encountered is general sepsis, or septicemia, or septico-pyemia. Fortunately such a complication is not common even though conditions are almost ideal. There is present an infectious focus that has unusual access to the circulation. Furthermore there prevails a condition where pus is present under pressure and the part can in no way be immobilized. Then finally, many of these infections are permitted by the patient to progress to a point at which the pain becomes un-

bearable before spontaneous rupture occurs or the services of a physician are sought.

Infections of the pharyngeal-maxillary space may follow tonsillar infection. This type of complication presents a swelling of the lateral pharyngeal wall and there may even be displacement of the tonsil and soft palate toward the median line. The absence of swelling of the tonsil itself and the absence of peritonsillar inflammation and swelling rule against peritonsillar abscess.

Occasionally one encounters a carotid sheath infection and these may simulate jugular thrombosis. It should be remembered that tenderness over the great vessels in the neck and even swelling in that region may be due to jugular thrombosis, to carotid sheath infection, to infection of deep cervical glands or to muscle spasm. To differentiate between carotid sheath infection and thrombosis of the internal jugular vein, one should be guided by the presence or absence of evidence of sepsis.

Another complication, and one that stimulated the writer to revive an antiquated interest in this subject, is post anginal sepsis. Its symptoms are that of any other sepsis. A majority of cases reported indicate that it is more common in young healthy adults, that it results from infections on the left side more frequently than on the right side. The time of occurrence following the throat infection may vary from a few days to three or more weeks. Briefly the usual story is that of an acute tonsillitis or pharyngitis with apparent recovery, a period of convalescence for a few to several days and then suddenly chills, fever and signs of sepsis.

In conclusion let it be remembered that tonsillar and peritonsillar infections and their complications, although usually innocent, may prove dangerous and even fatal; and that we have none other than Mosher as an authority for the statement: "The most common cause for the deep infections of the neck and neighboring structures may be found in or about the tonsils."

---

American Board of Obstetrics and Gynecology—The oral, clinical, and pathological examinations for Group A and Group B applicants will be held in San Francisco, California, on Monday and Tuesday, June 13 and 14, 1938.

An informal dinner for the Diplomates of this Board, their wives and others interested in the work of the Board, will be held at the Palace Hotel, San Francisco, on Wednesday evening, June 15, 1938, at seven o'clock. Dr. William D. Cutter, Secretary of the Council on Medical Education and Hospitals of the American Medical Association, will address the group, and the successful candidates of the preceding two days' examinations will be introduced in person. Tickets, at \$2.25 each, may be obtained in advance from Dr. Joseph L. Baer, 104 S. Michigan Avenue, Chicago, Illinois, or at the door. Reservations should be made in advance if possible.



---

## TUBERCULOSIS CONTROL

---

### ROENTGEN DIAGNOSIS OF PULMONARY TUBERCULOSIS

C. H. Warfield, M.D.

Wichita, Kansas

The roentgen diagnosis of pulmonary tuberculosis will be discussed rather briefly in this treatise, since space will not permit a thorough discussion of the subject.

A thorough understanding of what constitutes the healthy adult chest is very important since the bronchovascular tree presents many varied appearances due mainly to fibrous changes of old pathology and other acute lesions resembling tuberculosis.

It is well to state here that no one pathological lesion produces such a typical x-ray picture that the disease can be immediately labeled. Most infiltrations are diagnosed as certain pathological entities by the accessory signs, characteristic of the pathogenesis of the specific organism.

Perhaps the most common cause of an increase of the bronchovascular markings is due to disease of nasal accessory sinuses. This produces both a peribronchial fibrosis as well as bronchiectasis. It primarily involves the base of the lungs, more especially the right and not the apices.

The next most common change is that seen complicating heart disease. The infiltration of passive congestion is usually confined to the bases. However, if the patient is recumbent it may be seen uniformly through out both lungs as a mottled diffuse infiltration. The size and configuration of the heart as well as the fact that pulmonary tuberculosis is seldom seen complicating heart disease, usually clinches the diagnosis.

Pneumoconiosis is a fibrosis of the lymphatic channels caused by the constant inhalation of certain types of dust particles, the most common being silica. This fibrosis is linear and reticular in appearance, more dense in the hilus and middle third of the lungs. It is practically never seen in the apices. This of course applies to the first stage of the disease. The second and third stages are not important in this discussion.

Certain changes are seen in the lung fields caused by pathology that has pre-existed, but at the time of examination is causing no symptoms or physical findings. If these pathological changes are slight in amount we can disregard them as being of any clinical

significance. For example, calcified hilus glands, Ghon's tubercles, adhesions in the costo-phrenic angle, thickening of the interlobar pleura cause no symptoms and have no physical findings. Such findings when seen on an x-ray film can then be disregarded as having any clinical significance at the time of this examination. Fibrosis of the lymph channels not caused by constant irritative substances, but produced by pre-existing pathology cannot be considered as normal. Fibrosis of any standing produces emphysema thus reducing the vital capacity of the lung.

These in brief are some of the more common chest conditions commonly confused with tuberculosis.

The x-ray diagnosis of tuberculosis depends not only on the above conditions that simulate it, but a good knowledge of the pathology and pathogenesis. In brief there are three avenues of infection, hematogenous (miliary tuberculosis), lymphogenous (childhood form), or aerogenous (productive tuberculosis), the latter being the most common. As to just why the upper third of the lung is involved first in most cases is not thoroughly understood, however, most pathologists believe it is due to relatively poor blood and lymph supply. Aerogenic tuberculosis first starts in a medium size small bronchus, i.e. in the finest intralobular bronchioles and end bronchi. Thus it can be seen that the first infection that produces no symptoms cannot be seen by x-ray. No lesion is seen on the x-ray until it has involved at least one half of a secondary lobule. From this stage on the progress of tuberculosis can be well studied.

Miliary tuberculosis is diagnosed primarily by x-ray. It is characterized by a "snow-storm like infiltration, extending from apex to base, involving both lungs. This infiltration has the appearance of small white spots about 1 to 3 mm. in diameter with very indiscrete, poorly defined borders. As the disease progresses, these flake like spots increase in size until they begin to coalesce. Then the process may resemble caseous pneumonia.

The next form of tuberculosis is the productive and is by far the most common. The mode of infection is either aerogenic or lymphogenic. Productive tuberculosis has a predilection for the upper third of lung fields. In the early stages the infiltration is infraclavicular. It is characterized by small flake like areas of infiltration, located along the lymphatic channels. At this time one or more secondary lobules of the lung are involved. As the disease progresses it forms a triangular area of partial consolidation with the apex to the hilus and the base to the lung periphery with or without pleural thick-

ening. Later the triangular shape disappears as more lung tissue is involved and small cavities develop. These cavities finally coalesce to form one large cavity, in which are seen the fibrous bands of the old blood vessels. This makes the cavity look multiple. At about this stage, infiltration is seen to be developing in the middle third of the opposite lung, which is probably due to aspiration. The character of this new infection is the same as the primary except that cavities are seldom seen. During any time in the progress of the productive lesion, fluid may develop in varying quantities. Calcification is more commonly seen in the productive tuberculosis of children, than in the productive tuberculosis of adults. There is no one sign by x-ray that the tuberculosis is active. Small areas of infiltration in which most of it is calcified may be quite active clinically, and lesions showing cavities may not be active. Serial films however, are valuable to study the progress and character of the lesions.

Caseous pneumonia is the third form of tuberculosis seen by x-ray. It may be seen during the later stages of miliary tuberculosis, or any time during the development of productive tuberculosis. It may also be seen following the break-down of caseous glands about the hilus of either lung. It has no characteristics by x-ray that will differentiate it from any other form of pneumonia. It can be diagnosed only when other characteristic lesions of tuberculosis can be seen.

Lesions of tuberculosis that develop in the base of the lung show no characteristic x-ray findings. They can be diagnosed only when the organisms are found or there is a known tuberculous bone infection.

---

## OFFICIAL PROCEEDINGS

---

### HOUSE OF DELEGATES

The House of Delegates met in regular session at the Hotel Allis in Wichita, at 8:30 P.M. on Tuesday, May 10, 1938.

Following call to order by Dr. J. F. Gsell, President, Dr. H. L. Chambers, Chairman of the Credentials Committee, recommended that a delegate be seated for Kiowa County inasmuch as a charter application for that county medical society would be acted upon by the Council at this meeting.

The next order of business was the roll call of Delegates, Officers, Councilors and Past Presidents.

Dr. J. H. J. Upham, President of the American Medical Association, was presented to the House of Delegates.

The minutes of the last meeting were approved as printed in the Journal.

The following report by Dr. H. L. Chambers, Secretary, was read and adopted:

#### TO: THE HOUSE OF DELEGATES

Gentlemen:

Executive Secretary Munns has already made to you a detailed statement covering the activities, the statistics, and something of the aims and objectives that have occupied our attention during the year. All that remains for me to do is to review you a little on some matters that lie in the general medical field.

There was no regular session of the Legislature during the year and it did not seem wise to start anything at the Special Session. The Committee on Legislation has kept actively and alertly going during the year and the organization for propaganda or for defensive work has never before been functioning so efficiently or so smoothly. This committee shows a tendency to become more vocal than formerly and to make practical contacts with legislators and others. The time seems approaching when all those in positions of leadership—especially those leading the young—should be subject to a more searching scrutiny, and in this time of oversupply of teachers and preachers, it would seem to be relatively easy to denote or discharge, or at least not to advance those who show themselves ignorant, freakish, or fanatical in their attitude toward that large group of sciences, biologic, chemical, physical, and metaphysical whose aggregated sum is Medicine.

The Committee on Cancer Control has carried on for another year with its usual vigor and enthusiasm. The same general plan that succeeded so well last year was followed again this year. The specific facts are set out in the report of the Committee itself. The Women's Army now organized in the Department of Kansas under the supervision of Mrs. Donald Muir is expected to act as a solvent and softener ahead of the work of this Committee by way of reducing the passive resistance and the callous indifference of the public mind, and to act as a mordant and rejuvenator in the way of fixing important facts in the minds of the public and keeping interest so fresh that something worthwhile will be done.

The Committee on Tuberculosis has functioned more actively than ever before. Perhaps its outstanding accomplishments are mainly covered under two heads (a) the general awaking of interest in tuberculosis among the members of the profession and (b) the bringing together the forces that are already more or less organized to work against it. These are chiefly the State Board of Health, The State Sanatorium for Tuberculosis, The Tuberculosis and Health Association, the American Red Cross and always the local organization of the profession. With this setup this Committee is really "going to town".

The Committee on Conservation of Eyesight has gotten under way, has done a lot of work along lines a little different from the other clinical committees, and has arranged cooperation with the Social Security setup for care of the blind. This is its first year and it has already justified its existence.

The profession and the public is more venereal disease minded than they have ever been before and while the Committee covering this field has been going for two years, this is its first really active year. Its present setup has the approval of and fully cooperates with Surgeon General Parran's ideas. The informed public is showing an active interest, especially in lues. Much of the prudery



of former generations is slipping off and a saner view of the facts of life and their meaning to all of us is taking its place.

The Committee on the School of Medicine has done much to keep the profession well up to its leadership and in this very support has made it easier for the school itself to advance with the general advance in medicine.

The Committee on Medical Economics have kept on hammering at their problem and have succeeded in awakening many physicians who have hitherto been at least somnolent if not really comatose about economics. If we say that the profession is now under serious attack on three fronts,—professional, sociologic, and economic, then this committee is defending us on the one where our downfall is most likely to occur. The Committee itself scarcely realizes how desperate is the situation it is meeting and to some extent resolving.

A number of other committees, whose work, though important, is somewhat less spectacular are reporting and each has something interesting in its own field.

During the year there has been some interesting correspondence. The matter of local advertising has been discussed with interested members of the profession, charges and fees made the background for a correspondence with Probate Judge, lay charge of criminal malpractice against some of our members has been considered, the Committee of 430 has tried to get our support in a movement to defy the action of the A. M. A., some people in San Francisco endeavored to line us up in a movement to discredit the 430, and the Secretary of the Society in Washington, D. C., suggests that we do something about Senator Capper, and the Federal financing of a sort of insurance among a group of federal employees.

In looking out on the general field of medicine, I quote from a lecture recently delivered to the senior students of the School of Medicine: "A recent book, *The Mainland*, by Gilbert Seldes, asserts that the intelligentsia betrayed this country during the twenties. They hoodooed medicine and the medics more and worse—at least I see it more directly and more clearly than any other group. Up to then no considerable number of people were failing to get proper medical service if they wanted it, and few complained or had reason to complain about the cost of the service they had. During this period, many bright people found that in besmirching their country and its institutions in a pseudo-learned way, they could reach a pleasant sort of emotio-intellectual orgasm—and make some money out of it too. They have mostly subsided now, and the patient plodders, are, in honest sincerity, trying to regain something of the confidence and contentment the brilliant cynics took away from us. Because medicine deals with such universally important matters and because its scientific structure is so far beyond the ken of the ignorant and the quasi-educated, it has been peculiarly vulnerable to the mental sadism under discussion. Now, since the original trouble makers are passing from the picture, a swarm of mercenaries and freakish people who think of themselves as philanthropists and advanced citizens are keeping up the propaganda and adding variations to it as occasion offers".

In trying to evaluate the factors that cause our present situation and to estimate the ultimate things that are to come out of it, I reach the considered judgment that the medical profession is holding and even advancing or en-

larging its position in relation to the other groups of human activities.

Respectfully submitted,

H. L. Chambers, M.D.,  
Constitutional Sec'y

The following report by Dr. Geo. M. Gray, Treasurer, was read and adopted:

#### TO: THE HOUSE OF DELEGATES

The year just passed witnessed the greatest spending in the history of the Society. And if the same rate is continued through this year I see no hope for our savings bonds, for your expenditures will exceed your income.

You now have a cash balance in my hands on deposit in Riverview State bank in Kansas City, Kansas, of \$13,640.64, with vouchers amounting to \$129.83 outstanding and unpaid. When these are paid, your balance will be \$13,510.81. You also have savings bonds in the amount of \$7,500.00 in my locker in the same bank. And you have on deposit in the Central National Bank in Topeka, a balance in the Journal Fund of \$1,141.99, which has increased \$218.81 during the year. This makes a total amount on hand in Kansas City, Kansas, and in Topeka of \$14,652.80 and the \$7,500.00 in savings bonds makes the total resources \$22,152.80.

The largest expenditures of the year consisted of legislative expense during the session of the legislature, amounting to several hundred dollars; retainer fees for attorneys in pending legislation, was \$600.00 and \$269.28 for printing abstracts, making a total of \$869.28. This is probably a small part of your expense in these cases to be met on termination of the litigation. A third item of expense is that of three delegates and your executives secretary in attending the meeting of the American Medical Association which amounted to \$670.26.

Your expenditures for the year past totalled \$14,831.36 which is an average of about \$1,236.00 per month; with your cash balance of \$13,510.81, and figuring that the expenditures will be as great if not greater for the coming year than that of last year, you can see that your balance in the General and Defense Funds will not be sufficient to pay these expenses.

The total expenses from the General Fund for the past year amounted to \$13,161.99. The Defense Fund was \$1,669.37 and the Journal expenses amounted to \$4,728.83. Vouchers covering all these expenditures are listed and lists hereto attached.

The executive secretary's report is not in entire agreement with mine, as my report shows income received from May 1st 1937 to May 1st 1938 of \$14,919.00, while his report shows the income as \$14,640.00, a difference of \$279.00. The item of total expenditures for this period of one year, my report shows \$14,831.36 and the executive secretary's shows \$14,608.32, a difference of \$223.04. His balance on hand in all funds is \$14,420.80, which balance does not include the \$7,500.00 in savings bonds, which, when added to his \$14,420.80 makes a total of \$21,920.80, a difference of \$232.00.

I see no reason why there should be any difference in our reports as to expenditures. The difference in income might be explained by my giving credit to income not properly belonging to this past year. However, I am submitting a trial balance from both the Riverview State Bank and the Central National Bank, showing all trans-

actions passing through those banks during the year past.

Respectfully submitted,  
Geo. M. Gray, M.D.,  
Treasurer, Kansas Medical Society.

### TREASURER'S REPORT

Total Income for year ending May 1st, 1938:

Balance carried forward.....\$13,423.07  
Dues from Secretary ..... 14,919.10

Total ..... \$28,342.17  
Expended for year ending May 1st, 1938:  
General Fund .....\$13,161.99  
Defense Fund ..... 1,669.37

Total Expenditures ..... \$14,831.36

Balance ..... \$13,510.81  
Savings Bonds ..... \$7,500.00  
Journal Balance ..... 1,141.99 8,641.99

Total Resources .....\$22,152.80

(Secretary's note: The Treasurer's report and the Executive Secretary report were subsequently reconciled prior to the last meeting of the House of Delegates. Major item of difference was a refund of \$213.54 made by Shawnee County Medical Society on costs of 1937 annual session and computed differently. Total balance of \$22,152.80 on hand as of May 1, 1938 may be compared with total balance of \$22,613.87 shown on hand as of May 1, 1937.

Upon instruction of the President, the Executive Secretary was requested to present at this time the following financial information from his report:

#### Income

1,516 Members (Less 52 honorary)  
at \$10 .....\$14,640.00

#### Expense

##### General Fund

Salaries .....\$7,023.75  
Office Rental ..... 470.00  
Telephone &  
Telegraph ..... 606.66  
Postage ..... 562.97  
Stationery &  
Supplies ..... 599.22  
Meetings & Com-  
mittee Expense.. 461.40  
Travel ..... 1,422.18  
State Meeting  
(1937) ..... 290.81  
Miscellaneous ..... 340.57

\$11,777.56

##### Defense Fund

Total Defense Expense..... 1,669.87

Total Expense ..... \$13,447.43  
Special Fund Expense \$ 984.46  
Total Income .....\$14,640.00  
Total Expense ..... 13,447.43

Surplus ..... \$ 1,192.57  
Less Special Fund.. 984.46

Surplus ..... \$ 208.11

### RECONCILIATION

#### General Fund

(Voucher No. 669 to and including voucher No. 787)  
(Less \$10.00 refund of dues on voucher No. 677 off-  
set by identical remittance and less \$213.54 refunded  
by Shawnee County Medical Society on voucher No.  
670) .....\$12,938.45

#### Defense Fund

(Voucher No. 233 to and including  
voucher No. 240) ..... 1,669.87

Total Expense for May 1, 1937 to  
May 1, 1938 .....\$14,608.32  
Petty Cash On Hand ..... 187.52

\$14,420.80

Total shown above as Gen Exp.....\$11,777.56

Total shown above as Def. Exp..... 1,669.87

Total shown above as Sp. Fund Exp. 984.46

\$14,431.89

Less Petty cash balance

on hand ..... 11.09

Balance .....\$14,420.80

The following report was presented on behalf of  
the Editorial Board by Dr. W. M. Mills, Chairman:

#### TO: THE HOUSE OF DELEGATES

The Editorial Board submits the following report for  
the period from May 1, 1937 to May 1, 1938:

A financial statement for the Journal showing all in-  
come and expenses to and including the April, 1938 issue  
reflects the following condition:

Cash in Bank (As of May 1, 1938, not in-  
cluding total income or expense of April,  
1938 issue) .....\$1,141.99

Less Voucher No. 60 outstanding ..... 3.00

\$1,138.99

Standing of Journal Funds (Including April, 1938 issue)

#### Assets:

Cash in bank .....\$1,138.99

Good Accounts Receivable

(including April) ..... 679.18

Slow Accounts Receivable ..... 71.50

Due Bill ..... 25.00

\$1,914.67

#### Liabilities:

Accounts Payable (April issue) ..\$ 479.73

Other Accounts Payable ..... 9.18

506.91

Surplus .....\$1,407.76

Income & Expense Report—May 1, 1937 to May 1, 1938  
(including April issue)

#### Income:

Advertising .....\$4,821.91

Subscriptions ..... 74.50

Cuts Sold ..... 15.30

\$4,911.71



Expense:	
Printing .....	\$3,493.34
Salary .....	684.00
Engraving .....	222.03
Travel Expense .....	54.91
Stationery .....	34.47
Mlg & dlv. Jrls. ....	160.09
Drayage .....	9.75
Reprints .....	9.18
	<hr/>
	\$4,668.37
Net Surplus for Year .....	\$ 243.34

The net surplus of \$243.34 shown for the past year may be compared with a surplus of \$150.10 shown for the year 1936-37.

The slight increase may be attributed to the fact that the Journal was successful in increasing its advertising volume during the year and as it raised all of its advertising rates approximately twenty per cent, effective January 1, 1938. Even the larger surplus would have been shown had it not been for the fact that publishing costs increased and that certain additional expenditures were incurred with the hope of improving the publication.

The Journal continued its policy of paying its pro-rata share of the salary of the Journal assistant in the central office and it also continued to defray the expenses of all illustrations used in connection with original articles. The Journal also pays for its own stationery, supplies and stamps, and an attempt is made in all other ways to see that no cost of the publication accrues to the Society.

An advertising problem of importance during recent years has been as to whether the Journal should continue to accept advertisements from laboratories operated by laymen. The Board experimented with several possible solutions of this problem and finding none entirely satisfactory, recommended to the Council and received its approval that henceforth no laboratory advertisements shall be accepted unless the institution is operated by a doctor of medicine.

A considerable number of typographical changes were made in the Journal effective with the January issue. Page size was increased to 8½ x 11 inches; the cover was re-styled and type and spacing were completely changed. The changes were made with the hope of providing assistance to advertisers, better legibility and appearance, and in an effort to keep the Journal modern from a typographical standpoint.

At the request and with the assistance of the Committees on Conservation of Eyesight, Control of Tuberculosis and Control of Cancer, regular sections on Eye, Ear, Nose and Throat, Tuberculosis Control, and Cancer Control were instituted, commencing with the January and February issues.

The Journal is being supplied at cost price to students of the University of Kansas School of Medicine.

All books received for review purposes are contributed to Stormont Medical Library. All exchange publications are contributed to the Library of the University of Kansas School of Medicine in Kansas City.

The acquisition of a sufficient amount of scientific material still remains the foremost problem of the Editorial Board. The present policy of featuring original Kansas material necessitates a substantial amount of contributions. Thus any assistance the House of Delegates, the Council, the officers, and the county medical societies can give in

this direction will be greatly appreciated. The Editorial Board believes that Kansas members can and should prepare a larger number of scientific articles, not only for the Journal, but also for publication in the Journal of the American Medical Association and the other ethical periodicals devoted to medical specialties. The Board suggests to the House of Delegates as a possibility the assignment of this effort to a Society committee (or Committee on Scientific Work).

It is the belief of the Board that the work on the Journal could be expedited and improved through the use of the Journal assistant in a full time capacity, increasing our budget \$38.00 per month. Thus, since its present budget is adequate for this purpose, a recommendation is made that the Journal be permitted to pay the full salary and to utilize the full time services of that assistant. It is thought that this change from the present system, wherein the Journal pays two-thirds of her salary in exchange for two-thirds of her services, would also be of benefit to the Society, inasmuch as it would enable the employment of an additional central office assistant at little additional expenditure.

It is the desire of the Editorial Board that the Journal constantly be improved and that it shall completely represent the interests of all members. We shall be extremely grateful for your criticisms and suggestions toward that end.

Acknowledgement is made of the invaluable assistance rendered by other members of the Editorial Board and of the untiring work of our business manager, Mr. Clarence G. Munns, our executive secretary.

Respectfully submitted,  
W. M. Mills, M. D., Chairman  
Editorial Board

The report of the Defense Board was read by the Executive Secretary in the absence of Dr. O. P. Davis, Chairman, and was adopted. Dr. L. B. Gloyne moved that a telegram be sent to Dr. Davis expressing regret that he was unable to attend the meeting. The motion was unanimously adopted, and the Executive Secretary was instructed to send the message.

#### TO: THE HOUSE OF DELGATES

We, the Medical Defense Board, submit our annual report as follows:

During the year ending April 1, 1938, there were only two new malpractice cases filed, which we believe is the smallest number of cases filed during the history of the Board. During this same year there were seven cases tried. Five of these cases resulted in a verdict in favor of the physician. In the other two there was a verdict of \$500.00 and a verdict of \$2,500.00 respectively. During the year one claim was settled by the insurance carrier; although in this particular instance no suit was actually filed. As is well known, the Board has always been opposed to the compromise and settlement of cases out of court. Our object is not only to defend the physician attacked, but to discourage new cases which might naturally result from an easy accomplishment of the purpose of such cases.

There remains upon our active docket only four cases for trial or other disposal.

We are strongly of the opinion that although our cases are diminishing in number each year apparently, we should not cease to be fully prepared to defend any or

as many cases as might be brought to us. We do not believe that we should have to go shopping for a new lawyer in case of an application for defense. This is said because there has been shown a disposition in some quarters to employ an individual lawyer in the locality where a case might arise. Constant readiness for defense, whatever the prospects may be, should be our watchword.

The report of our attorneys is also submitted and is to be considered as part of this report.

Respectfully submitted,  
THE MEDICAL DEFENSE BOARD  
O. P. Davis, M. D., Chairman  
L. S. Nelson, M. D.  
C. C. Stillman, M. D.

The next order of business was the Executive Secretary's report by Clarence G. Munns, which was read and adopted. (Not printed by reason of length. Copies available for loan to members.)

Dr. F. R. Croson moved that the Councilor's reports be accepted as printed in the Journal. Seconded and carried.

The report of the Committee on Control of Cancer was adopted as printed in the Journal.

The report of the Committee on History was adopted as printed in the Journal.

The report of the Committee on Hospital Survey was adopted as printed in the Journal.

The report of the Committee on Maternal and Child Welfare was adopted as printed in the Journal.

Dr. F. L. Loveland presented an oral report on behalf of the Medical Economics Committee outlining the possibilities for improved indigent medical care plans through assistance of the State Board of Social Welfare of Kansas, and the desirability of the Society cooperating in the American Medical Association survey of medical facilities. Upon a motion seconded and carried, the Committee was authorized to take any steps it deemed advisable in connection with both of these subjects.

The report of the Committee on Medical School was adopted as printed in the Journal.

The following report of the Committee on Public Health and Education was read by Dr. N. P. Sherwood, Chairman, and adopted:

This Committee desires to furnish as its report the following minutes of its last meeting:

A meeting of the Committee on Public Health and Education was held in Topeka on April 10. Members present were: N. P. Sherwood, M. D., Chairman; Robert Carr, M. D.; J. B. Ungles, M. D.; Earl Mills, M. D.; H. L. Chambers, M.D., was present as Secretary of the Society and Clarence G. Munns, as Executive Secretary.

First order of business was discussion as to whether the lay educational work of the Society could be expedited through assistance of this committee in attempting to

coordinate the work of the various other Society committees in this regard. It was the consensus of this committee that lay educational activities could be more efficiently standardized by coordination through a single committee. The committee, therefore, agreed to offer its assistance to the other committees in any way desired in this connection.

Discussion followed concerning the advisability of instituting a Society news release, radio, and speaker's bureau projects and the various mechanical difficulties incidental thereto. Upon motion by Dr. Mills, seconded by Dr. Ungles, it was decided that the committee shall present to the next House of Delegates, a recommendation that either the Society should finance and conduct a broad lay educational program including news releases, radio talks, and talk outlines or that a project of this kind should be operated jointly by the Society and the Kansas State Board of Health.

It was agreed that the committee should submit to the House of Delegates the question of possible advantages of the county medical societies conducting public health campaigns through the paid columns of Kansas newspapers. Suggestions pertaining to preparation of a procedure for county medical society lay educational programs and furtherance of providing speakers at the meetings of state groups and organizations were tabled until the above possibilities can be more definitely ascertained.

A request was made that the Chairman should interview Mr. W. T. Markham, Superintendent of Public Instruction in Kansas to determine ways and means in which the Society can cooperate more fully with public health programs in Kansas schools.

Adjournment followed.

The following is the report of the Committee on Stormont Medical Library:

#### TO: THE HOUSE OF DELEGATES

Report on Stormont Fund, March 30, 1937—April 15, 1938.

Balance on hand March 30, 1937.....	\$379.18
Receipts from interest, March 30, 1937-April 15, 1938 .....	229.80

Total receipts, March 30, 1937-April 15, 1938....\$608.98

Expenditures, March 30, 1937—April 15, 1938.

Periodicals .....	\$107.00
Books .....	41.30
Continuations .....	23.64

	\$171.94	\$171.94
Balance on hand April 15, 1938 .....		\$437.04

The following periodicals are now being received by the Stormont Medical Library:

American Journal of Diseases of Children  
American Journal of Medical Sciences  
American Journal of Public Health  
Annals of Surgery  
Archives of Internal Medicine  
(1) Archives of Otolaryngology  
(1) Archives of Ophthalmology  
Archives of Pathology  
Archives of Pediatrics  
Archives of Surgery  
\* Current Medical Digest  
Endocrinology



- \* Jackson County Medical Journal
  - Journal of American Medical Association
  - \* Journal of Kansas Medical Society
  - \* Journal of Missouri Medical Association
  - \* Medical Economics
  - Medical Record
  - \* Modern Medicine
  - Quarterly Cumulative Index Medicus
  - Surgery, Gynecology and Obstetrics
  - \* Texas State Journal of Medicine
  - \* Gift (1) New
- Additions to Stormont Medical Library—March 31, 1937  
—April 15, 1938.
- Abt. I. A.—1935 Year Book of Pediatrics.
- Alexander, John—The Collapse Therapy of Pulmonary Tuberculosis. 1937.
- American College of Surgeons. 1938.
- American Medical Association Proceedings. 1936.
- American Medical Association. Council on Pharmacy and Chemistry. 1934.
- American Pharmaceutical Association. The National Formulary. 1935.
- Bainbridge, W. S.—Report on the 7th International Congress of Military Medicine.
- Balyeat and Bowen—Allergic Diseases; Their Diagnosis and Treatment. 1936.
- Bayly, M.—Cancer: The Failure of Modern Research. 1936.
- Betterman, Amos—Dr. Betterman's diary for the years 1868, 1873, 1893, 1909, 1910 by C E. Blanchard. 1937.
- Bram, Israel—Exophthalmic Goiter and Its Medical Treatment. 1936.
- Bridges, Milton—Food and Beverage Analyses. 1935.
- Clendening, Logan—Balanced Diet. 1936.
- Clendening, Logan—Methods of Treatment. 1935.
- Collected Papers of the Mayo Clinic. Vol. 28.
- Cunningham, John H.—1935 Yearbook of Urology.
- DeLee, Joseph B.—1935 Yearbook of Obstetrics and Gynecology.
- Dublin—Lotka—Twenty-five Years of Health Progress. 1937.
- Dutton—Lake—Parventeral Therapy, 1936.
- Elmer—Rose—Physical Diagnosis. 1935.
- Facts about Commercially Canned Goods. (Pamphlet).
- Graham, Evarts—1935 Year Book of General Surgery.
- Hamilton, Alice—Industrial Toxicology. 1934.
- Heise, Fred—1000 Questions and Answers on T. B. 1935.
- International Clinics—46th Series, v.1-4.
- Kampmeier, Otto F.—Origin and development of the Mediastinal and Aortic Thyroids and the Periaortic Fat Bodies. (Illinois university. Illinois Medical and Dental Monographs, vol. 35, No. 12.)
- Kemp, Henry W.—How to Practice medicine. 1935.
- Knopf, S. Adolphus—Heart Disease and Tuberculosis. 1936.
- Kugelmass, I. N.—Growing Superior Childrene. 1936.
- Levin, Louis—Living Along with Heart disease. 1935.
- Lewis, Nolan—Research in dementia praecox. 1936.
- Mackenty, John E.—Malignant Disease of the Larynx.
- Major, R. H.—Disease and Destiny. 1936.
- Meakins, Jonathan C.—Practice of Medicine. 1936.
- Menninger, K. A.—Man Against Himself. 1938.
- Menninger, William C.—Juvenile Paresis. 1937.
- Milbank Memorial Fund.—Policies and Procedures in Public Health. 1935. (Pam.)
- Montague, Joseph F.—Why Bring That Up; a Guide to and from Sea-Sickness. 1936.
- Monroe, Robert T.—Medical Papers. 1936.
- Morton, Dudley J.—The Human Foot; Its Evolution, Physiology and Functional Disorders. 1935.
- New and Non-Official Remedies, 1935, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1935. 1935.
- Nutritive and Therapeutic Values of the Banana.
- Nutritive Aspects of Canned Foods (Pamphlet).
- Pack & Davis—Burns; Types, Pathology and Management. 1930.
- Quarterly Cumulative Index Medicus. Vols. 20-22.
- Rattner, Herbert—William Allen Pusey; an Appreciation by Friends and Co-workers. 1937.
- Reese—Paskind—Sevringhaus—1935 Year Book of Neurology, Psychiatry and Endocrinology.
- Sindoni, Anthony M.—Diabetes: A Modern Manual. 1937.
- Scholl, William M.—The Human Foot; Anatomy, Physiology, Mechanics, Deformities and Treatments. 1931.
- Stoll, Arthur—The Cardiac Glycosides. 1937.
- Surgical Clinics of North America—April, June, August, October, December, 1937; February, 1938.
- Thornton, E. Quin—Medical Formulary. 1937.
- Transactions of American Therapeutic Society. Vol. 35.
- Trumper, Max—Memoranda of Toxicology. 1937.
- Year Book of Neurology—Psychiatry and Endocrinology, 1935.

Respectfully submitted,

F. C. Taggart, M.D., Chairman, Committee on Stormont Medical Library.

The report of the Committee on Public Policy was adopted as printed in the Journal.

The report of the Committee on Scientific Work was adopted as printed in the Journal.

The report of the Committee on Auxiliary was adopted as printed in the Journal.

The report of the Committee on Stormont Medical Library was adopted as printed in the Journal.

The report of the Committee on Conservation of Eyesight was adopted as printed in the Journal.

The report of the Committee on Endowment was adopted as printed in the Journal.

The report of the Committee on Pharmacy was adopted as printed in the Journal. Dr. R. W. Moore, Chairman, explained the purposes of a newly organized joint committee of pharmacists, dentists, hospitals and physicians, and reported concerning a meeting that committee had held during the morning of May 10.

The report of the Committee on Control of Tuberculosis was adopted as printed in the Journal. Dr. H. N. Tihen, Chairman of the Committee on Control of Tuberculosis, made an additional comment that tuberculosis facilities of the state are still inadequate, which is a large problem for the committee to consider; that tuberculosis lay education is of great importance, and that physicians and the

county medical societies should provide leadership in this direction.

The report of the Committee on Control of Venereal Disease was adopted as printed in the Journal.

The President asked permission to appoint a reference committee on resolutions and a reference committee on constitution and by-laws to consider certain new business under those subjects. Upon motion seconded and carried this authority was granted. Dr. Gsell then announced the following reference committees which were requested to report back at the Thursday meeting of the House of Delegates: Reference Committee on Resolutions: Dr. W. M. Mills, Chairman, Dr. J. F. Hassig, Dr. H. E. Haskins, Dr. J. E. Henshall and Dr. L. D. Johnson; Reference Committee on Constitution and By-Laws: Dr. A. W. Fegtly, Chairman, Dr. L. G. Allen, Dr. H. L. Chambers, Dr. E. C. Duncan and Dr. W. F. Bernstorff.

A resolution presented by Dr. H. W. Powers, President of the Eye, Ear, Nose and Throat Section, asking that this section be made an officially recognized section of the Society was referred to the Constitution and By-Laws Committee. Other suggestions referred to that reference committee were: A suggestion that the retiring president be added as a member of the Council; establishment of the Committee on Venereal Disease, the Committee on Conservation of Eyesight, and the Committee on Control of Tuberculosis as standing committees of the Society; and reconsideration of the Constitution and By-laws for needed changes.

The Reference Committee on Resolutions was asked to consider any resolutions which the Society should adopt.

The first meeting of the House of Delegates was then adjourned.

The House of Delegates met in regular session at 8:30 A.M. on May 12, 1938 at the Hotel Allis in Wichita. Dr. J. F. Gsell, President, served as presiding officer.

The first order of business was the report of the Reference Committee on Resolutions presented by Dr. W. M. Mills, Chairman. The committee submitted the following recommendations: That the Executive Secretary be instructed to prepare suitable resolutions expressing appreciation to the Kansas State Tax Commission, the State Board of Social Welfare of Kansas, the Kansas Tuberculosis and Health Association and the Attorney General for the assistance each has provided the Society during the past year; that the Kansas delegates to the House of Delegates of the American Medical As-

sociation prepare and present a resolution to that body recommending that the American Medical Association sponsor or conduct Halls of Health similar to the Sedgwick County Medical Society Hall of Health in all parts of the country. The recommendations were adopted.

The Reference Committee on Constitution and By-Laws submitted the following report which was adopted:

#### TO: THE HOUSE OF DELEGATES.

Your committee on very short notice has had referred to it a number of vital changes and additions to the Constitution and By-Laws as adopted at the 1936 Session of the Society at Kansas City, Kansas, May, 1936.

After considerable discussion on the merits and defects of the suggestions, we wish to present for your consideration the following:

1. An Amendment to the Constitution, Article VI, Section 1, to provide for the addition of the immediate past president to the list of ex-officio members of the Council, making the paragraph read as follows:

"Constitution—Article V-, Council, Section 1.

The Council shall consist of one Councilor from each Councilor District, and in addition the President, President-Elect, immediate Past President, Secretary, and the Treasurer, as ex-officio members."

An amendment to the By-Laws, Chapter XI, Committees, Section 10, providing for the addition of the Immediate Past President to the Executive Committee of the Council, making the section read as follows:

"By-Laws—Article XI, Section 10. The Executive Committee of the Council shall be composed of the President, the President-Elect, the Immediate Past President, the Secretary and the Treasurer. This committee shall meet at the call of the President, and shall have authority to act in the interim between meetings of the Council upon all matters which would ordinarily require approval by the Council, which do not necessitate a special meeting of the Council, and which have not been delegated elsewhere by these By-Laws."

3. A resolution from the Section on Ophthalmology, and Oto-Rhino-Laryngology passed at a meeting held in Wichita Kansas on May 10 1938 asking an amendment to the By-Laws of The Kansas Medical Society—Chapter LV reading as follows:-

"Amend Chapter LV of the By-Laws of The Kansas Medical Society by adding the following as Section 2, and by renumbering the present sections 2, 3, 4, 5, 6, 7, 8, 9, as sections 3, 4, 5, 6, 7, 8, 9, 10 respectively.

A Section on Ophthalmology and Oto-Rhino-Laryngology shall be recognized as an official section of this Society. Any member of this Society who practice ophthalmology, laryngology, otology, or rhinology shall be entitled to register as a member of this Section and to attend its meetings. Society membership however, shall be a pre-requisite to membership in this Section. The offices of this Section shall be a chairman, a vice-chairman, and a secretary-treasurer who shall be elected annually for a term of one year each, and who shall preside at the meetings of this Section in the order named. Upon consent



of the President of this Society, this Section shall have the power to appoint special committees for assistance in its work, but the findings of such committees shall not be executed or made public without the consent of the President, the Council, or the House of Delegates of this Society. A meeting of this Section shall be held annually at the time and place of the annual session of this Society, and other meetings may be held with approval of the Council. The Scientific program for the annual meeting of this Section shall be prepared by the officers or by a committee of this Section, and shall be forwarded to the Committee on Scientific Work prior to March 15th of each year for inclusion in the official annual session program; provided, however, that the expense of such program shall coincide with the amount established in the official annual session budget, and that in the event of disagreement upon this amount, the Council shall have power to make final decision. Provided also, that the chronological order and arrangements of the program of this Section shall comply with the general annual session program as designated by the Committee on Scientific work, except upon special approval of The Council. This Section shall not collect dues except upon special permission by the Council, and its papers, records, and proceedings shall become the property of this Society and shall be filed in the central office of this Society.

The Section shall be entitled to two delegates, in the House of Delegates of the Society."

After considerable discussion and study it was decided that this amendment was already for the greater part included in Chapter IV of these By-Laws, Section 1, with the exception of the clause especially calling for official recognition of the Section, the cause requesting preparation of its own programs, and for representation in the House of Delegates by two delegates.

With the consent of the representative presenting the proposed amendment to our Committee, we offer for your consideration the following amendments.

An amendment to the By-Laws Chapter IV, General Meetings, as a second paragraph and forming a part of Section 1 to read as follows:

"A Section on Ophthalmology, and Oto-Rhinology shall be recognized as an official Section of this Society. Any member of this Society who practices ophthalmology, laryngology, otology, or rhinology shall be entitled to register as a member of this Section and to attend its meetings. As provided in paragraph 1 of this section of Chapter IV, it shall be permitted to select and elect its own officers, for a term of one year each. It shall be permitted to prepare a suitable program for its annual sessions subject to the approval of the Committee on Scientific Work, which shall be sent to the Committee on Scientific Work prior to March 15 of each year, for inclusion in the Annual Session program. The papers, records and proceedings of this Section shall become the property of this Society and shall be filed in the central office of this Society. Intermediate meetings of the Section may be held as desired, subject to permission of the Council or of the Executive Committee."

4. Another amendment necessitated by the above is recommended as follows:

An amendment to the By-Laws Chapter V, House of Delegates, Section 3

"Section 3, Chapter V, House of Delegates shall be amended by the addition of the following paragraph which shall become a part of Section 3.

"Each organized specialty section recognized by the House of Delegates as a component subdivision of the Annual Session of this Society shall be entitled to One (1) delegate to be chosen by said specialty section and certified to the Committee on Credentials before the opening of the House of Delegates at each annual session."

5. An Amendment to Chapter V, House of Delegates, Section 16 is recommended as follows:

"An Amendment to the By-Laws, Chapter V, House of Delegates, Section 16; providing for the elimination of the provisional clause of said section, and making it read as follows:

"Section 16. It shall elect delegates to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body."

6. Certain Special Committees having been appointed by Presidents since the adoption of this Constitution and having function of sufficient importance as to demand regular Constitutional standing committees should be included in the By-Laws as regular standing Committees. These are:

Committee on Tuberculosis.

Committee on Venereal Disease.

Committee on Conservation of Eyesight.

Committee on Allied Grops to Medical Practice.

The latter to include such groups as Laboratory and X-Ray technicians, Pharmacy, Dentistry, and any other allied organizations or groups. Special Sub-Committees may be formed from the general committee to specifically take up matters dealing with the particular group or organization.

Committee on Constitution and Rules.

Committee on Endowment.

The amendment to the By-Laws, Chapter XI, Committees, Section 1.

"The following committees shall be added to the present list of standing committees of this Society:

(Listed as above).

7. Chapter XI, Committees, shall be amended by the addition of the following sections:

"Section 21.—The Committee on Tuberculosis shall consist of five or more members. (It shall be the duty of this committee to carry on the work as begun and outlined by the special Committee on Tuberculosis now functioning. Detailed specifications may be included later.)

"Section 22.—The Committee on Venereal Disease shall consist of five or more members. (It shall be the duty of this committee to carry on the work as begun and outlined by the special Committee on Venereal Disease now functioning. Detailed specification may be included later.)

"Section 23.—The Committee on Conservation of Eyesight shall consist of five or more members. (It shall be the duty of this committee to carry on the work as begun and outlined by the special committee



## A CAREFREE TOUR to California ...



**Via** Special Trains to the National Convention  
OF THE  
**AMERICAN MEDICAL ASSN.**  
San Francisco, June 13-17

*The Banff Springs Hotel, one of the  
most beautiful places in the world*

### WHAT THE ALL-EXPENSE RATES INCLUDE:

1. First class rail transportation from home city to Pacific Coast and return.
2. Pullman accommodations as selected (First Class) from Chicago to the Pacific Coast and return to Chicago.
3. Transfers by motor from station to hotels and vice versa.
4. Sightseeing as specified in the itinerary.
5. Hotel accommodations first class, basis two persons to a room with bath, except at San Francisco.
6. All meals from Chicago to the Pacific Coast and return except at San Francisco during the convention period.
7. Baggage handled at all points.
8. Services of an experienced tour manager who will accompany the party from Chicago to Pacific Coast and return.

### YOU CAN HAVE *the Vacation of your life*

... aboard one of the physicians' deluxe special trains enroute to Sunny California. To you and your family the unforgettable West will unfold its magnificent panoramas of famed scenic attractions every minute of the way. Come and meet old friends—make countless new ones. From your city the all-expense cost is very low because of the enthusiastic support of your own and 20 other state medical societies.

### *Going* to San Francisco these deluxe convention trains visit:

Indian Detour, Grand Canyon, Los Angeles, Santa Catalina Island.

### *Returning* you have choice of:

ROUTE ONE: Portland, Seattle, Victoria, Vancouver, Canadian Rockies, Lake Louise and Banff Springs (stop-over privileges), or  
ROUTE TWO: Yellowstone National Park, Salt Lake City, Royal Gorge, Colorado Springs, Denver.

#### TYPICAL COSTS, ALL-EXPENSE OFFICIAL TOURS TO SAN FRANCISCO AND RETURN

*Atlanta, Ga.....	\$319.00	*Louisville, Ky.....	\$301.00
*Birmingham, Ala.....	311.00	*Omaha, Nebr.....	277.00
*Boston, Mass.....	350.00	*Philadelphia, Pa.....	339.00
*Detroit, Mich.....	308.00	*Providence, R. I.....	350.00
*Dist. of Col.....	336.00	*St. Louis, Mo.....	287.00
*Indianapolis, Ind.....	301.00	*Wichita, Kans.....	298.00

Send for descriptive Folder to Your State Secretary or Transportation Agents

## AMERICAN EXPRESS TRAVEL SERVICE

907 WALNUT ST.

KANSAS CITY, MO.

**LOW COST  
ALL-EXPENSE  
TOURS** Write FOR DETAILS



of the same name now functioning. Detailed specification may be included later.)

"Section 24.—The Committee on Allied Groups to Medical Practice shall consist of seven or more members. (It shall be the duty of this committee to carry on the work as begun and outlined by the special Committee on Border Line Groups and the Committee on Pharmacy now functioning. Detailed specifications may be included later.)

"Section 25.—The Committee on Constitution and Rules shall consist of five or more members. It shall be the duty of this committee to make study of Constitution and Rules, and from time to time make such recommendations for changes, deletions, and modifications as may arise from time to time in order to further the work of this organization.

Section 26—The Committee on Endowment shall be composed of three or more members. It shall be the duty of this committee to receive, supervise, and / or administer, in the name of, and for The Kansas Medical Society, all endowments, bequests and / or gifts to The Kansas Medical Society, or for the specific work of any of its committees. It shall co-operate with other agencies having funds that could well be spent for, or are established for, medical research or medical education for the purpose of endeavoring to see that the best use possible of such funds is secured for the benefit of medical science or medical education.

It shall co-operate with any of the specific committees of this Society in the proper use of any or all endowments, bequests or gifts which may be entrusted to its care for specific purposes that profitable or educational advantages to the science of medicine may be secured by the use of the same.

It shall further co-operate with any of the specific committees of this Society in securing so far as possible proper and profitable use for funds or bequests in the hands of or under the control of other agencies, when such bequests, funds or gifts are for the express purpose of medical research or medical education.

Its work shall be under the advice of and subject to the wishes of the Council, or the Executive Committee."

Other matters were considered but it was deemed unwise to present them at this time.

In closing this report your committee wishes to apologize for the incompleteness of the specifications of the duties of these several committees and asks it to be understood that more detailed statements of duties of each may be compiled by the central office or by other sources and included in the several amendments when presented to the membership through the official Journal for their consideration before action on same is taken at the proper time, and having the same force as if read in detail at this time.

These amendments are presented for consideration and decisive vote on them as per the Constitutional requirements for amendments to the Constitution and By-Laws. We wish to call especial attention to the fact that should the form or contents of any of these differ in any way from the ideas of those suggesting the amendments that it may be possible to present different plans covering the same points by constitutional methods during the year, so that any one of several plans may be accepted or rejected

at next year's session (1939) when these should be voted upon.

Respectfully submitted,

Committee on Constitution and Rules, appointed May 10, 1938.

A. W. Fegly, M. D., Chairman

H. L. Chambers, M. D.

L. G. Allen, M. D.

E. C. Duncan, M. D.

W. F. Bernstorff, M. D.

Following this was the roll call of the House of Delegates and the annual election of officers and councilors. The following officers and councilors were elected: Dr. C. C. Nesselrode, President-Elect; Dr. H. L. Chambers, Secretary; Dr. Geo. M. Gray, Treasurer; Dr. F. L. Loveland, First Vice President; Dr. G. I. Thacher, Second Vice President; Dr. J. L. Lattimore, Councilor for the Fourth District; Dr. Marion Trueheart, Councilor for the Fifth District, and Dr. A. C. Armitage, Councilor for the Eleventh District. The delegates from the Ninth District did not elect a Councilor to fill the expired term of Dr. Walter Stephenson. The President thereupon ruled that Dr. Stephenson would serve as Councilor for that District until his successor has been elected.

Dr. H. L. Snyder was elected as a delegate to the House of Delegates of the American Medical Association for the 1938 and 1939 meetings of that body.

Upon a motion adopted it was determined that the Society delegates to the American Medical Association shall appoint their own alternate in the event that they are unable to attend the meeting.

Upon a motion adopted it was agreed that the Society should defray the traveling expenses of the delegates to the 1938 meeting of the American Medical Association, and also that Dr. N. E. Melencamp and Clarence G. Munns shall be sent as representatives of the Society to that meeting with expenses paid.

Upon motion made and seconded and carried unanimously the Society expressed its appreciation to the Sedgwick County Medical Society for its excellent and efficient presentation of the 79th Annual Session, and particularly for the Hall of Health.

Adjournment followed.

## COUNCIL MEETING

A meeting of the Council was held at the Hotel Allis in Wichita on May 12, 1938.

Members present were as follows: Dr. J. F. Gsell, Dr. N. E. Melencamp, Dr. Geo. W. Davis, Dr. H. L. Chambers, Dr. Geo. M. Gray, Dr. L. F. Barney, Dr. L. D. Johnson, Dr. J. L. Lattimore, Dr. M.

# BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

## III. EXHAUSTING OR PREHEATING

● Modern canning procedures provide for the exclusion from the sealed container of air, and other gases present in raw food material, to the greatest possible degree.

In the sealed can, oxygen, in particular, is undesirable, whether it be released from food cells or be present in the form of entrapped air. If present in the sealed tin container, oxygen can react with the food and the interior of the can and directly affect the quality, nutritive value and merchantable life of the canned food. Other gases—for example, carbon dioxide produced by cellular respiration—should also be excluded as far as is practical. If present in large amounts, these gases may place undue strain on the container during the heat process to which canned foods are subjected.

In commercial canning practice, certain operations—specifically the blanch—may aid in elimination of gases from raw food tissues. However, main dependence is placed upon what are known as “exhausting” or “preheating” operations, not only to expel gases from raw foods, but also to exclude air from the can.

Briefly, the exhausting operation is accomplished by mechanically passing the open can containing the raw food through a so-called “exhaust box” in which hot water or steam is used to expand the food by heat and drive out air and other gases contained in the food and in the can. The

times and temperatures used in commercial exhausting operations will naturally vary with the nature of the product (1).

After exhausting, the can is immediately permanently sealed, heat processed and cooled. During cooling, the contraction of the heated contents of the can creates the vacuum normally present in commercially canned foods.

With certain products, instead of exhausting as described above, the same effect is produced by preheating the food in kettles or similar devices; filling into the cans while still hot; and immediately sealing the containers. With still other products, an exhausting effect is produced by adding boiling water, syrup or brines to the food in the can. In some instances, exhausting is accomplished by mechanical rather than by thermal means. Specially designed sealing or “closing” machines are used to withdraw air and other gases by applying high vacuum to the can and immediately sealing on the cover.

Such in brief are the purposes of commercial exhausting operations and the means by which they are usually accomplished. Modern canners recognize that these operations are most important to the success of their canning procedures. They appreciate that only by strict supervision and control of exhausting operations can the quality and nutritive values of their products be maintained at a consistently high level.

## AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

(1) Appertizing or The Art of Canning”,  
A. W. Bitting, The Trade Pressroom,  
San Francisco, 1937.

*This is the thirty-sixth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



Trueheart, Dr. W. P. Callahan, Dr. F. R. Croson, Dr. L. S. Nelson, Dr. A. C. Armitage and Dr. Geo. O. Speirs.

The first order of business was the election of officers delegated to the Council by the Constitution and By-Laws. The following officers were elected: Dr. O. P. Davis, Topeka, as permanent Chairman Emeritus of the Medical Defense Board; Dr. L. S. Nelson, Salina, as Chairman of the Medical Defense Board for a term of one year; Dr. James D. Bowen, Topeka, as a member of the Medical Defense Board for a term of three years; Dr. R. B. Stewart, Topeka, as a member of the Editorial Board for a three year term; and Dr. Don C. Wakeman, Topeka, as a member of the Editorial Board for a three year term.

Upon motion made, seconded and carried, it was agreed that the invitation of the Shawnee County Medical Society be accepted to hold the 80th Annual Session of the Society in Topeka on May 1, 2, 3, 4, 1939.

Upon motion adopted the Executive Secretary was instructed to remove the names of all unpaid members from the official mailing list of the Society, effective June 1, 1938.

An application was read from Cowley County Medical Society requesting that payment of 1937 dues by one of its members should be waived. A motion approving this request was adopted.

A motion was made and adopted that Dr. D. R. MacLeod of Hooker, Oklahoma, should be reimbursed for attorney's fees in the amount of \$75.00.

Dr. J. F. Hassig, Secretary of the State Board of Medical Registration and Examination, asked the Council for its opinion as to the policy the Board should follow in registering foreign physicians in Kansas. Following a discussion of possibilities in this connection, the Council adopted a motion expressing confidence in the policy suggested by Dr. Hassig.

The Executive Committee was authorized to increase the salaries of Miss Isabel Wright and Mrs. Harold Sheafor in the amount it believed advisable, and also to investigate the needs and to approve an expenditure to refurnish the central office of the Society. The Executive Secretary was instructed to prepare an additional salary voucher in the amount of \$400.00 in his own favor.

Adjournment followed.

---

The following report by Dean H. R. Wahl of the University of Kansas School of Medicine is a portion of the Committee on Medical School's report:

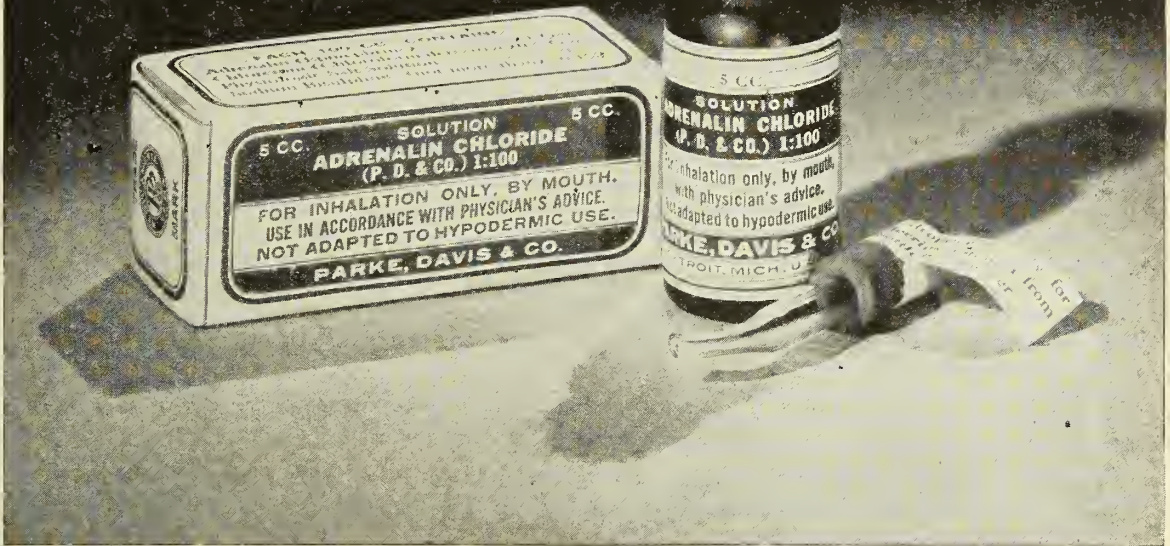
There are at the present time 292 students enrolled in the Medical School; eighty students are in the freshman class at Lawrence, and 212 are enrolled in Kansas City. Sixty-seven students are scheduled to gra-

duate in June of this year. Many more students are applying for admission into Medical School than we can possibly accommodate. During the past summer, we had more than six hundred applications for admission; most of these were from out of the state, and were not given consideration. There were, however, 113 applicants who were residents of Kansas and who had met all the catalogue requirements. In addition, there were twenty-three who were Kansas residents, but who did not meet the requirements. We admitted seventy-three students, all being residents of Kansas. Of the original 113 who applied and who were eligible, sixty-five were admitted, and the rest were placed temporarily on the waiting list; approximately one-half of those on the waiting list were eventually admitted, owing to the fact that a considerable number of those originally accepted withdrew their applications because of financial reasons or because they were transferred to another school. This left approximately fifteen students who were fully qualified but could not be admitted because of the rule recently passed by the Board of Regents that the first two years must be limited to eighty students, and the third and fourth years to seventy with the present clinical facilities. Most of our faculty members feel that we should not carry more than sixty students, but the pressure for admission is so great, that we have stretched this to seventy as the uppremost limit.

We admitted seven students from out of the state. They all came from Kansas City, Missouri. One reason that we take Kansas City, Missouri, students is that it is unwise to limit all our places to Kansas residents, for there is a much larger number of Kansas men receiving medical education in institutions outside of Kansas than the number of out-of-state men here; in fact, there are 357 Kansas men studying medicine, according to the last A.M.A. statistics, of which 197 of these men are studying in Kansas. Furthermore, we have teaching facilities in Kansas City General Hospital for contagious diseases and acute psychiatric cases, for which we have no facilities here. In return for this accommodation, we have unofficially agreed to take ten per cent of our students from Kansas City, Missouri. It should be borne in mind that the Kansas City, Missouri, students pay \$400 tuition, while Kansas residents pay only \$150. Owing to the competition for admission into medical schools over the country, those who have three or four years' preparation are more likely to be admitted; in fact, the Association of American Medical Colleges reports that not over six per cent of the total number of students entering medical schools today have only two years' preparation; the balance of the students have three or more years' work. Accordingly, our faculty has recommended that the requirements for admission into our Medical School be increased to three years instead of two years. Oklahoma made this requirement just recently, and Missouri has had the requirement for a number of years.

As you know, our Medical School is divided; the first year and a half is spent at Lawrence, and the last two and a half years are in Kansas City. The physical facilities at the Lawrence division are woefully inadequate. The department of bacteriology is the only department adequately housed. Anatomy is crowded in temporary wooden quarters, a fire hazard on the campus. The department of biochemistry occupies borrowed quarters from the department of pharmacy,

# TREATMENT OF BRONCHIAL ASTHMA BY ORAL INHALATION



## ADRENALIN CHLORIDE SOLUTION 1:100

**THE** oral inhalation of Adrenalin Chloride Solution 1:100 is promptly effective in relieving symptoms of bronchial asthma—in most cases results have been quite as satisfactory as those following hypodermic injection of the familiar 1:1000 solution. Ner-

vousness and tachycardia, as well as other reactions which often accompany parenteral administration, are much less frequent following inhalation therapy. Discomfort and inconvenience of hypodermic injection are obviated by this new treatment.

Adrenalin is the Parke-Davis brand of Epinephrine U.S.P. Adrenalin Chloride Solution 1:100 is accepted by the Council on Pharmacy and Chemistry of the American Medical Association; it is supplied in 5-cc. vials, together with dropper for transferring the solution to a suitable atomizer, vaporizer, or nebulizer. The apparatus used must deliver a fine spray entirely free from drops.

**PARKE, DAVIS & COMPANY • DETROIT**

*The World's Largest Makers of Pharmaceutical and Biological Products*



and is in badly cramped quarters. The department of physiology is in two separate buildings. For many years there has been the need of a single building to house the medical sciences. Recently, a movement was developed to combine the department of pharmacy and the departments of medical sciences into one building. This would be a happy solution to the needs of these departments on the Lawrence campus. The School of Pharmacy is fully as crowded and cramped as the School of Medicine at Lawrence. There is a growing relationship between the department of pharmacy and that of medical sciences, and they could easily be quartered in the same building. It would be much more economical, also, to have them both in one building.

There are ninety-two nurses in training in our Nursing School at the present time; thirty-one are in the graduating class. While the high school education is all that is required for admission, the girls who have one or two years of college preparation receive preference. In fact, so many well prepared girls are applying, that more than half of the recent applicants have been college girls, and in the last class which entered, fully one-half of the girls had three or more years of college preparation. There is a combined five-year course, including three years of college work and two years in nursing school, which is quite popular among the girls, and it appears that this course will soon provide the bulk of the nurses in this School. The nursing department here is also providing special training for surgical work in the operating rooms and in obstetrical nursing. Most of the girls accepted here are Kansas residents; of course, other things being equal, the Kansas girls are always given preference. Our Nursing School facilities are quite inadequate. In a recent investigation, we found that there were more Kansas girls receiving nursing education in hospitals in Kansas City, Missouri, than in our own school, because of the limited facilities here. The actual figures show that there are 156 Kansas girls receiving training in Kansas City, Missouri.

There has recently been some change in the curriculum of the Medical School, increasing emphasis being placed on psychiatry, and on the social and economic aspects of medicine. A considerable number of outstanding practicing physicians in the state have been called in to give lectures to the graduating class.

The Medical School is showing considerable change in its physical facilities. The Connecting Corridor is being erected, joining the hospital proper with the new Out-Patient Department; \$100,000 was recently provided by the state for this corridor, and it will be finished in another month. It is composed of two floors, the upper floor providing future quarters for the x-ray department which is now very crowded.

The legislature provided \$37,500 for an addition to the Power Plant in order to heat the new units; this amount was, however, not a sufficient sum, but a P.W.A. grant was obtained, making the total amount available \$68,000. With this, a considerable enlargement of the Power Plant has been made, with the addition of a new boiler, and enlargement of the laundry, so that now the Power Plant is twice its former size, and will be adequate to serve the new units.

The Medical School recently received another gift

for the Hixon Laboratory for Medical Research. This gift amounted to \$45,000, and will provide for the additional two floors of this building. When completed, the building will be four stories high, the third floor to provide facilities for a library of medical history. Two other floors will be used primarily for research work of the various departments of the Medical School.

The last legislature appropriated \$75,000 for a new colored ward, but this money will not be available until February, 1939; it is for this reason that this building cannot be erected this year.

A considerable amount of equipment is needed to enable us to utilize the new buildings. The Clinic Building is incomplete, and about \$75,000 will be needed to equip and complete this building; the two upper floors are not finished, there is no elevator in the building, and no equipment. The Children's Building is also incomplete; the two upper floors are not finished, and about \$45,000 will be needed to equip and complete the unit so that it can be used. There is no elevator in the building as yet. No equipment will be needed for the Hixon Laboratory, as the gift is sufficient to cover the necessary equipment. An item of \$12,000, coming in under equipment, will be needed to get a new and complete inter-communicating telephone system for the new plant. A new laboratory building should be provided, and will probably cost \$250,000, to house the laboratory and teaching departments now located in the old building a mile away. Some additional funds will be needed to completely equip the new x-ray department and to provide an adequate cancer clinic.

The Out-Patient Department has shown a marked increase in attendance, probably reflecting the present economic conditions. In fact, during the past three months, the attendance has increased fully twenty per cent. An endeavor is being made to carefully sift out patients coming here in order to reduce the abuse of this Clinic to a minimum. The admission of patients to the Clinic is in the hands of the Social Service Department which is in the process of providing an organization to reduce the number of patients who have no business in the Clinic; we are endeavoring as much as possible to prevent the abuse of this institution by patients who should go to a private physician for medical care. The Out-Patient Department and Emergency Room are both being regulated to provide for only the genuine indigent patient.

The hospital has been crowded to capacity most of the year. The present capacity is approximately three hundred beds. During the past fiscal year, there were 5,709 patients treated here. The character of our hospital patients is undergoing a change, due to the tendency of physicians over the state to take care for the patients locally instead of sending them here. Consequently, the hospital is receiving only the more difficult diagnostic problem and an increasing number of patients belonging to the urology service, neurosurgery, ophthalmology, otorhinolaryngology, etc. These patients are not quite so desirable for teaching purposes. The actual teaching material now has to be obtained more and more from our local community; many of these patients have no funds, and a considerable drain is made on our medical school budget to provide teaching material inasmuch as the hospital does not have funds to take care of these patients free.

Increasing demands are being made on the hospital

# THE Lattimore Laboratories

TOPEKA, KANSAS

J. L. Lattimore, M. D. Director

A. C. Keith, B. S. Chemist

Allen Gold, M.A., M.T.

H. C. Ebendorf, M. T.

We invite consultation about the case that needs pathological service.

Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00

*Containers furnished upon request.*

## OFFICES:

Topeka, Kansas

El Dorado, Kansas

Sedalia, Mo.

McAlester, Okla.

# RADIUM

## —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

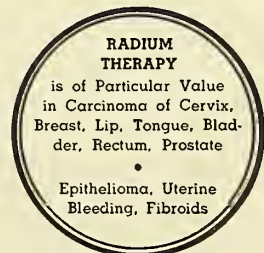
The complete service for Radium users

For details, address

## RADIUM AND RADON CORPORATION

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO





for diagnostic service to doctors over the state, especially doctors in the smaller communities. These patients provide teaching material while here, but we do not wish to carry on this service except as an accommodation to the doctors and in turn indirectly serving the poorer classes of patients. The Medical School would like to get the advice of the Society as to how far this kind of service should be rendered, if at all.


An increasing effort is being made to provide graduate courses and special instruction for the medical men in practice over the state. In fact, a new system has been planned for this spring. During the

Easter Vacation, the entire staff of the Medical School is to be turned over to the general practitioner at no cost; all the facilities of the hospital and the patients are to be turned over for the benefit of these doctors, for a period of one week. Approximately, one hundred doctors have already enrolled in this course, and we are hoping that this type of work will be of more practical value than any of the courses given heretofore. The Medical School gladly invites any comments on these graduate courses and any of the other work it is doing.

#### TO: THE HOUSE OF DELEGATES

I wish to inform the Society that the following of our members have died during the year on the date and from the causes described:

Name	Date	AGE	TOWN	CAUSE
Algie, Robert.....	Jan. 25, '37	61	Clay Center	Splenomyelogenous leukemia
Allaman, George W.....	Sept. 24	74	Atchison	Diabetes mellitus
Axtell, John T.....	Feb. 20	80	Newton	Died out of state
Bandel, Oscar A.....	Oct. 12	56	Parsons	Diabetes mellitus
Bartlett, Walter E.....	June 7	67	Belle Plaine	Coronary occlusion
Brookhart, Harry Hubbard.....	Jan. 29	64	Columbus	Auto accident
Burnaman, William C.....	June 24	52	Washington	Chronic interstitial nephritis and coronary thrombosis
Creel, James C.....	March 21	69	Parsons	Influenza-cerebral hemorrhage
Douglass, James H.....	June 19	55	Arkansas City	Cerebral hemorrhage—general arteriosclerosis
Emery, Frank W.....	April 9	73	Wichita	Myocardial failure
Faust, John W.....	Oct. 29	61	Kansas City	Lobar pneumonia-acute myocarditis
Fortney, Alvin M.....	Nov. 5	55	Lawrence	
Funk, Fred Raymond.....	Aug. 25	61	Dresden	Angina pectoris
Graves, Wilburn H.....	July 9	54	Pittsburg	Cardio-vascular renal decompensation
Groody, Hazley Thomas.....	June 2	53	Manhattan	Died out of state
Henderson, Ralph C.....	Feb. 17	61	Erie	Chronic myocarditis
Herring, Hubert Guthrie.....	March 25	83	LeRoy	Cerebral hemorrhage
Holcomb, Fred L.....	Jan. 31	59	Coldwater	Auto accident
Jacobus, Willis L.....	Nov. 10	68	Ottawa	Cirrhosis of the liver
Jameson, Charles Howard.....	June 14	50	Hays	Acute dilation of the heart due to overexertion
Johnson, Henry Benton.....	May 7	66	Pomona	Angina pectoris
Keller, L. A.....	April 8	69	Pittsburg	Coronary occlusion
Kennedy, Harvey Leander.....	Dec. 28	69	Ottawa	Chronic nephritis-coronary occlusion
Little, James M.....	Dec. 27	65	Sterling	Mitral insufficiency
Martin, Emanuel Norman.....	Dec. 16	69	Clay Center	Carcinoma of Ampulla Vater
Morrison, E. E.....	Jan. 18 '38	69	Great Bend	Diabetes mellitus
Morrison, Virgil.....	Dec. 17	55	Atchison	Died out of state
McCool, Stanton Albert.....	Feb. 6	54	Seneca	Auto accident
McCurdy, Robert Allen.....	Dec. 15	29	ElDorado	Died out of state-malignancy
McDonough, Wm. Connolly.....	April 17	69	Topeka	Chronic myocarditis-arteriosclerosis
McGill, John F.....	Nov. 28	70	Fort Scott	Chronic interstitial nephritis and chronic arthritis
McGinnis, Clive S.....	May 14	59	Parsons	Diabetes mellitus-coronary occlusion
Parker, Lynn H.....	Jan. 2, '38	51	Parsons	Auto accident
Payne, Oscar C.....		68	Humboldt	Chronic myocarditis mitral stenosis insufficiency
Perkins, Anna A.....	Nov. 24	65	ElDorado	Diabetes mellitus-abscess of lung
Scott, James M.....	May 13	44	Topeka	Angina pectoris-polycystic degeneration of kidney
Shippey, Roland H.....	July 30	63	Wichita	Portal cirrhosis-mesenteric thrombosis
Smith, Wm. Francis.....	May 1	57	Atchison	
Stafford, Rolla B.....	April 26	29	Topeka	
Taylor, Robert A.....	Jan. 31	55	Topeka	Lobar pneumonia-acute myocarditis
Vermillion, Carl McClain.....	Aug. 12	40	Pratt	Gangrene in right leg due to thrombosis and phlebitis
Vincent, Henry A.....	June 2	61	Wellington	Acute dilation of the heart
Warner, Terry W.....	Dec. 28	74	Parker	Cerebral embolism
Warren, Lloyd Peyton.....	Jan. 17	66	Wichita	Carcinoma of prostate with metastases to lungs and liver
Woodmansee, John Austin.....	July 28	52	Emporia	Cardio-renal disease



# THE SWING TO PHILIP MORRIS

The rapid increase in Philip Morris sales is unquestioned evidence of America's growing appreciation of a superior product.

Of no little consequence in making Philip Morris a superior cigarette is the decrease in irritation\* due to the use of diethylene glycol as hygroscopic agent.

*\*Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245  
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154  
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11  
Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3  
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60*

## PHILIP MORRIS & CO.

Tune in to "JOHNNY PRESENTS" on the air Coast-to-Coast  
Tuesday evenings, NBC . . . Saturday evenings, CBS

**PHILIP MORRIS & CO. LTD., INC.**

**119 FIFTH AVE., NEW YORK**

\*Please send me reprint of papers from

Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐ Laryngoscope, 1935, XLV, 149-154 ☐  
N. Y. State Jour. Med., 1935, 35, No. 11, 590 ☐ Laryngoscope, 1937, XLVII, 58-60 ☐

**SIGNED:** \_\_\_\_\_  
(Please write name plainly)

**ADDRESS** \_\_\_\_\_

**CITY** \_\_\_\_\_ **STATE** \_\_\_\_\_



---



---

## NEWS NOTES

---



---

### OFFICIAL CALL

To the Officers, Fellows and Members of the American Medical Association:

The eighty-ninth annual session of the American Medical Association will be held in San Francisco, California, from Monday, June the thirteenth, to Friday, June the seventeenth, Nineteen hundred and thirty-eight.

The House of Delegates will convene on Monday, June the thirteenth.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, June the fourteenth, at 8:30 P. M.

The various sections of the Scientific Assembly will meet Wednesday, June the fifteenth at 9 A. M. and at 2 P. M. and subsequently according to their respective programs.

Attest: J. H. J. Upham, *President*  
 Olin West, *Secretary* Nathan B. Van Etten  
*Speaker, House of Delegates*  
 Chicago, Illinois, March the fifteenth

---

### COOPER CASE

The Kansas Supreme Court announced its decision in the case of State vs. Cooper on May 7.

Cooper, who has treated cancers with an escharotic paste and without a license to practice medicine and surgery, was enjoined from further practice.

Major controversy of the case was whether the Injunction Law, passed in the 1937 session of the legislature and under which Cooper was originally enjoined, is constitutional. The Court upheld the constitutionality of the Act.

The complete opinion will be printed in the June issue of The Journal.

---

### INDIGENT CARE

The Research Department of the State Board of Social Welfare of Kansas will release its survey of Kansas Indigent Medical Care on approximately May 27.

The survey which includes a report of present methods and costs of indigent medical care in the state, also includes a recommendation that each county should enter into a lump sum or fee schedule contracts with its county medical society.

The Committee on Medical Economics will issue a bulletin to the county medical societies in the near future outlining certain suggestions wherein it is believed that assistance may be provided to those counties which do not at present have satisfactory plans for indigent medical care. A plan is also being considered wherein the county commissioners in each of the six State Board of Public Welfare districts of the state, will hold a series of joint meetings with members of the medical profession in those districts, representatives of the above board, and representatives of the Society, for discussion of this subject.

### EXCURSION TO A. M. A. MEETING

Elsewhere in this issue is an announcement by the American Express Company describing an all expense tour which is being offered to physicians and their families who plan on attending the San Francisco American Medical Association meeting June 13-17.

This is the first time that the physicians have been offered the facilities of de-luxe special trains visiting the scenic attractions of the west, at a very nominal all-expense cost from your home city. Traversing a route that contains many wonders, one's particular preferences are bound to be among them. For instance, the Indian Pueblo District with its remnants of an ancient civilization long vanished from this continent. The Grand Canyon offers its grandeur of scenic attractions. Southern California, its glowing, sun-filled cities and orange empires, Spanish Missions, Catalina Island and the Pacific rolling up to the edge of white sands. That is the route to San Francisco and the Convention.

Returning, there is a choice of two routes. One includes the charming cities of America's Northwest: Portland, Seattle, Victoria, Vancouver and the majestic Canadian Rockies and its resorts. Route Two winds through Yellowstone National Park and its world-famous geyser region, through Salt Lake City, and the scenic beauties of the Royal Gorge, Colorado Springs and the mile-high city, Denver.

That is but a rough outline of the itineraries offered to physicians planning to attend the Convention this June. These special train tours are restricted to physicians, their friends and families, and have been made possible through the united interest and support of twenty-five state medical societies which makes it possible to offer the tours on an economical, all-expense basis. This is an ideal opportunity to enjoy a wonderful vacation with your family and in the company of friends and colleagues in the Society and in other state societies.

---

### OSTEOPATHS

The following is a report of the present status of the case of State vs. Gleason now pending in the Kansas Supreme Court and which is expected to determine the rights of osteopaths to practice medicine and surgery in Kansas:

The osteopaths filed their original brief in the case on February 15.

The State filed its original brief on March 20.

The Society filed an amicus curiae brief on April 3.

Oral argument was held on April 4 and the case was then taken under advisement.

Decision was not handed down on the opinion day of May 7 inasmuch as the osteopaths filed a reply brief on May 6.

The Society and the State filed answer briefs to the osteopath's reply brief on May 16.

Decision may be received at the next opinion day of June 11 or at a later date if the Court feels that additional time is needed for preparation of the opinion.

Copies of both of the Society's briefs and both of the State's briefs have been forwarded to each of the county medical societies of the state. The available supply of the osteopathic briefs did not permit distribution to the county medical societies but loan copies may be secured from the central office. The secretaries of the county medical societies will be glad to loan the copies of the briefs to all members who desire to read them.

# Behind MERCUROCHROME

(dibrom-oxymercuri-fluorescein-sodium)



*is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

Hynson, Westcott & Dunning, Inc.  
BALTIMORE, MARYLAND

16,000

ethical



Since 1902

## practitioners

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

**\$1,500,000 Assets**

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited with the State of Nebraska**

for the protection of our members residing in every State in the U.S.A.

**PHYSICIANS CASUALTY ASSOCIATION**

**PHYSICIANS HEALTH ASSOCIATION**

400 First National Bank Building  
OMAHA - - - NEBRASKA



Since 1912



## DIET

When the impulse to defecate is lessened due to improper diet or lack of discipline, the fecal matter usually becomes dehydrated and impacted in the bowel . . . To simplify the problem of bowel regularity, Petrolagar may be prescribed to advantage, as it assists in the regulation of bowel movement. Petrolagar mixes intimately with the bulk of the stool to induce a soft, easily passed mass. By reason of its pleasant taste and mild but thorough action, Petrolagar is agreeable to patients of all ages. Five types of Petrolagar provide a choice of laxative medication suitable for the individual patient. Petrolagar Laboratories, Inc., 8134 McCormick Blvd., Chicago, Ill.

*Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.*





### HOSPITAL SALES TAX

The Kansas Tax Commission announced the following new regulation pertaining to religious, charitable, and benevolent institutions on May 13:

"Sales of tangible personal property to be used exclusively for educational, religious, benevolent or charitable purposes.

(a) Sales to state, etc.—Sales of tangible personal property to the State of Kansas, Departments of the State, State institutions, or to any political subdivision of the State, are exempt from payment of the tax except when the State of Kansas, any Department of the State, any State institution or any political subdivision of the State is engaged in a business taxable under the Sales Tax Act.

(b) Sales to educational, religious, benevolent or charitable institutions.—Sales of tangible personal property to any educational, religious, benevolent or charitable association, corporation, or organization, if such personal property is to be used exclusively by such association, corporation or organization for educational, religious, benevolent or charitable purposes are exempt from payment of the Sales Tax except when such property is to be used by any such association, corporation or organization in a business taxable under the Sales Tax Act.

(c) Individuals.—No exemptions herein provided for shall apply to sales of tangible personal property to any individual, except that sales of building material to contractors, subcontractors or repairmen to be used by them in erecting, building on, or otherwise improving, altering or repairing any building that is to be used exclusively for educational, religious, benevolent or charitable purposes, shall be exempt from the Sales Tax."

This regulation which was prompted by Senate Bill 90 passed in the recent special session of the legislature, will eliminate charitable and non-profit hospitals from the necessity of paying sales tax on all supplies used in those institutions.

### VENEREAL DISEASE COURSE

The venereal disease postgraduate program presented by Dr. Arthur D. Gray of Topeka and sponsored by the Kansas State Board of Health in cooperation with the Committee on Venereal Disease of the Society will be completed on June 15.

One meeting in each Councilor District has been held as follows:

District 1	Hiawatha	March 24 and 25
District 2	Ottawa	May 23 and 24
District 4	Emporia	April 13 and 14
District 5	Hutchinson	April 25 and 26
District 8	Salina	April 18 and 19
District 9	Colby	April 6 and 7
District 10	Hays	April 4 and 5
District 11	Kinsley	May 2 and 3
District 12	Garden City	May 4 and 5

Remaining meetings are to be held at the following dates and places:

District 3	Parsons	June 2 and 3
District 6	El Dorado	May 26 and 27
District 7	Concordia	June 14 and 15

The course has been particularly well attended; numerous letters have been received by the central office requesting additional postgraduate activities of this kind; and it is

probable that the Kansas State Board of Health and the Society will present a large number of similar courses during the next year.

### SALES TAX ON OPTICAL SUPPLIES

Representatives of the Kansas Tax Commission held a joint meeting with the Kansas optical suppliers in Kansas City, Missouri, on April 25.

Major item of discussion was the handling of sales tax on optical supplies.

An agreement was made that the present plan of collecting two per cent on twice the amount of wholesale value of optical supplies shall be continued and that each optical supplier shall pay tax on the total volume of monthly business. This will mean that no oculists or optometrists in the state will be licensed to collect sales tax on optical supplies; that none will collect tax from his patients and instead, that they will remit tax on the above basis to their optical suppliers.

Foremost advantages of the plan are: The Tax Commission is saved the necessity of auditing each oculist and optometrist in the state; oculists and optometrists are saved the difficulty of having to collect tax tokens, the keeping of records, and the making of monthly reports; and a standardized retail price is made possible.

### TUBERCULOSIS PROGRAM

A postgraduate program and a lay educational program on tuberculosis was presented in five councilor districts of the state from April 18 to 22. The program, consisting of meetings in the afternoon for the laity and evening meetings for the profession, was financed by the Kansas Tuberculosis and Health Association and was sponsored by that organization in cooperation with the Committee on Control of Tuberculosis of the Society and the Kansas State Board of Health.

Speakers were Dr. Paul A. Teschner, Assistant Director of Bureau of Health and Public Instruction, American Medical Association, Chicago, Illinois, and Dr. H. I. Spector, Chief, of Chest Clinic and Instruction in Internal Medicine, St. Louis University, St. Louis, Missouri.

Meetings were held in the following towns: Leavenworth, Ottawa, Parsons, Wichita, and Russell.

Both the lay and professional meetings were well attended and as a result the Kansas Tuberculosis and Health Association is considering the possibility of presenting additional programs of this kind.

### BLIND PROGRAM

The State Board of Social Welfare of Kansas recently announced its medical and surgical treatment program for blind assistance clients.

Major items of the program are as follows:

Kansas blind assistance clients whose sight, it is believed, can be improved by medical and surgical treatment, will be afforded such treatment at state expense. Kansas doctors of medicine who limit their work to eye, or eye, ear, nose and throat will provide eye medication and eye surgery. Other Kansas doctors of medicine will provide treatment for systemic diseases affecting the eye. Service will be rendered on a free choice basis insofar as geographical location

## JOHNSON HOSPITAL CHANUTE, KANSAS

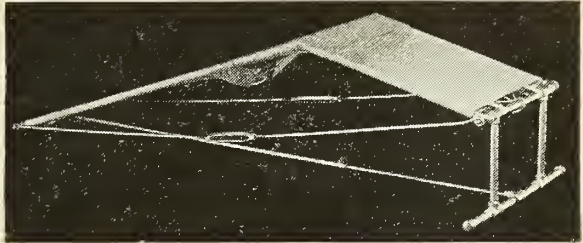
Complete Clinical  
Laboratory  
Radium  
X-Ray

## THE W. E. ISLE COMPANY

1121 Grand Avenue  
Entire Second Floor

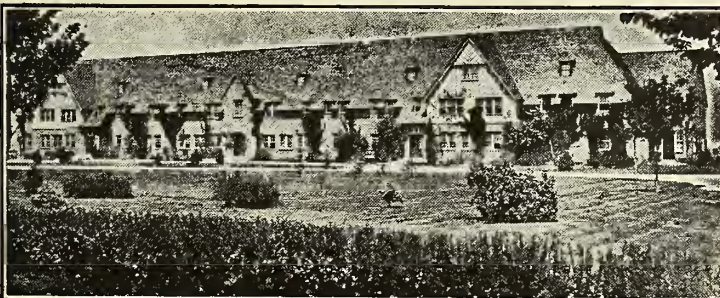
Kansas City, Mo.  
Victor 2350

IMPROVED BRADFORD FRAME  
*Made in Our Own Factory*



# Pure refreshment

## WOODCROFT HOSPITAL



### PUEBLO, COLORADO

Founded 1886 by Dr. Rupert Work

A modern, newly constructed  
sanitarium for the scientific  
care and treatment of those  
nervously and mentally ill, the  
senile and drug addicts.

CRUM EPLER, M.D.  
Superintendent



makes possible. Hospitalization, drugs, and all necessary appliances will also be furnished. The following fee schedule will be utilized for this purpose:

Office Calls—\$150 for each office call in a case not requiring surgical care.

#### Surgical care and After Treatment—

Cataract .....	\$75.00
Glaucoma .....	75.00
Iridectomy .....	35.00
Discission .....	25.00
Enucleation .....	35.00
Lid Operation .....	25.00
Pterygium .....	25.00
Dachryocystectomy .....	50.00
Separated Retina .....	75.00
Refraction other than that following surgical condition .....	5.00
Spinal Puncture .....	5.00
Anaesthetist's Fee .....	7.50

Refraction—In those cases submitted only for refraction, refraction fee of \$5.00 is allowed.

Hospital Charges—A day rate of \$2.50 per patient is allowed for hospital care.

The operating room fee for all local eye operations is \$5.00

For operations under a general anaesthetic the operating room fee is \$7.00.

Consultation—\$10.00.

Anaesthetist—\$7.50.

Radiologist—Examination of the orbit, \$5.00; head, \$7.00.

Special Nurse—Rates and hours are to be the prevailing ones in the community.

All services must be approved by Dr. C. J. Mullen, Kansas City, State Ophthalmologist before payment of fees can be made.

The program was prepared by the State Ophthalmologist and the Division of the Blind of the State Board of Social Welfare of Kansas, in close cooperation with the Committee on Conservation of Eyesight of the Society.

### TECHNICIANS

The Kansas Society of X-Ray Technicians held its first annual meeting in Wichita on April 23.

Members who appeared on the program were Dr. J. F. Gsell, Wichita; Dr. Lewis G. Allen, Kansas City; Dr. E. M. Seydell, Wichita; Dr. Opie W. Swope, Wichita; and Dr. Anthony F. Rossitto, Wichita.

The organization is composed of twenty-five x-ray technicians from various parts of the state. Miss Esther Hulpier, Hutchison, is president; Mr. Charles Dyerly, Wichita, vice-president; and Mrs. Pat May, Wichita, secretary-treasurer.

### PORTER LECTURE

The University of Kansas School of Medicine presented the eighth Porter Lectureship in Medicine at Kansas City and Lawrence on April 19 and 20. The lecturer was Dr. William Boyd, professor of pathology, University of Toronto School of Medicine, Toronto, Ontario. His subjects were "Bronchial Carcinoma", "Growth, Normal and Abnormal", and "Nephritis".

The Porter Lectureship was made possible by Dr. J. L. Porter of Paola who in 1918 bequeathed to the University

of Kansas School of Medicine a sum of money for the stimulation of medical scholarship and research. A portion of this fund is used annually to provide a post-graduate course for physicians.

### LIBRARY BOOKS

Barton County Medical Society announced recently that it had placed fifty-two books on medicine and public health in the library of the Hoisington High School.

The books were selected by a committee of that society in cooperation with a local library committee. The cost of the books was defrayed by a bequest in the will of a local citizen authorizing the purchase of a substantial number of books for that library. Barton County Medical Society selected the books on public health and medicine from a list prepared by the Kansas Women's Auxiliary and which is intended to provide assistance for similar projects in other counties.

### PAMPHLETS

The Committee on Conservation of Eyesight recently prepared a series of fourteen lay educational pamphlets on topics related to conservation of eyesight.

The pamphlets were approved by the State Board of Social Welfare of Kansas and were printed in two million copies for distribution next year to Kansas school children.

### DEATH NOTICES

Dr. Robert Jackson Cabeen, 61 years of age, died as the result of a heart attack in Chicago, Illinois, on April 23. Dr. Cabeen was born in Aledo, Illinois, and later moved to Seaton, Illinois. He received his degree in medicine from the University Medical College of Kansas City in 1903. He practiced in Kansas City a short time and then moved to Leon, where he had resided for the past thirty years. He had been a member of the school board at Leon for twenty-five years, had served in the capacity of mayor of the town for several years, and was also health officer for Butler County for a number of years. Dr. Cabeen was a member of the Butler-Greenwood County Medical Society.

Dr. Marcus P. Crisler, 67 years of age, died at his home in Colorado Springs, Colorado, on March 15, 1938. Dr. Crisler was born near Monroe, Missouri, and received his medical education from the University Medical College of Kansas City from which he graduated in 1900. Dr. Crisler was a former resident of Hardtner, Kansas.

Dr. John Crawford Hall, 79 years of age, died at his home in McPherson on March 21, 1938. He was born in Fall Branch, Tennessee, and received his medical education at the Kansas City Medical College from which he was graduated in 1887. For ten years he practiced at Conway, Kansas, and from there moved to McPherson where he had been practicing for the past forty years. Dr. Hall was an honorary member of the McPherson County Medical Society.

Dr. Leon A. Jacobus, 71 years of age, died at St. Mary's Hospital in Winfield on March 20, 1938. Dr. Jacobus was born in Lima, Ohio, and moved to Winfield, Kansas, as a small boy. He attended grade and high school at Winfield and received his degree in medicine

## Ambulance Service

To which you may  
trust your most  
gravely ill patient

•

NEW AMBULANCES  
TWO TRAINED ATTENDANTS

•

*Rates: 15c a mile to any point in Kansas—  
everything included*

WALL-DIFFENDERFER  
MORTUARY

Topeka,  
Kansas.

723 West 6th  
Phone 3-2326

## Cook County Graduate School of Medicine

(In Affiliation with Cook County Hospital)  
Incorporated not for profit.

### ANNOUNCES CONTINUOUS COURSES

**MEDICINE**—Two Weeks Intensive Course starting June 20th. Electrocardiography every month. Special courses during August.

**SURGERY**—General Courses One, Two, Three and Six Months; Two Weeks Intensive Course in Surgical Technique with practice on living tissue; Clinical Course; Special Courses. Courses start every Monday.

**GYNECOLOGY**—Personal Courses May 2nd, June 13th, August 22nd. Gynecological Pathology by Dr. Schiller starting July 25th.

**OBSTETRICS**—Two Weeks Intensive Course starting June 6th; Informal Course starting every week.

**FRACTURES & TRAUMATIC SURGERY**—Informal Course; Intensive Formal Course starting June 6th.

**UROLOGY**—One Month Course; Two Weeks Course starting every two weeks.

**CYSTOSCOPY**—Ten day Practical Course Rotary every two weeks.

**GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES EVERY WEEK.**

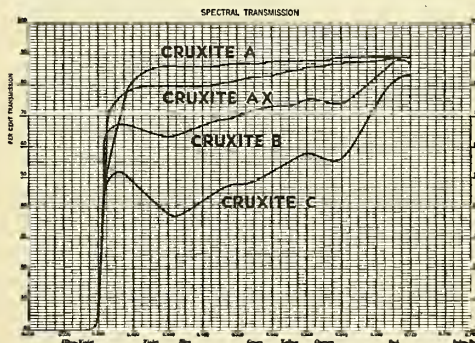
**TEACHING FACILITY—ATTENDING STAFF OF COOK COUNTY HOSPITAL**

Address: Registrar, 427 South Honore Street,  
Chicago, Illinois.

*For protection with correction—*

## Cruxite Lenses

Cruxite lenses give protection from those useless rays which may harm the delicate tissues of the eye. They absorb the Ultra-Violet. Cruxite lenses also look well on the face—they blend becomingly with the complexion and do not distort color values. They are also available in Tillyer lens accuracy. Only Cruxite lenses combine all four advantages: protection—correction—no color distortion—and a more natural, more becoming appearance. The four shades of Cruxite lenses provide ample absorption of Ultra-Violet and an excellent range of visible light absorption.



**American Optical Company**



from the University of Illinois College of Medicine, Chicago, in 1893. He returned to Winfield and entered into a partnership with Dr. George Emerson and practiced there until the time of his death. He was a member of the Cowley County Medical Society.

Dr. Will Cantwell McIrvin, 78 years of age, died at the home of a patient as the result of accidental carbon monoxide poisoning in Atwood on May 16, 1938. Dr. McIrvin graduated from the College of Physicians and Surgeons, Keokuk, Iowa, in 1879 and from the Barnes Medical College in St. Louis, Missouri, in 1893. Dr. McIrvin was one of the oldest practicing physicians in Rawlins County.

Dr. Henry L. Salthouse, 79 years of age, died at the home of his son in Hutchinson on March 12, 1938. Dr. Salthouse was born in Kingston, Illinois and received his high school and college education in Bloomington, Illinois. He studied medicine at the Starling Medical College in Columbus, Ohio, which later became the medical department of the State University of Ohio. He began his practice at Beleflower, Illinois and moved to McPherson in 1891 where he practiced until his retirement a few years ago. He was an honorary member of the McPherson County Medical Society.

Dr. Emily Brooke Slosson, 86 years of age, died at her home in Sabetha on March 15, 1938. Dr. Slosson was born in Columbus, Ohio, and later moved with her family to Salem, Nebraska. She attended the grade schools at Salem and graduated from the Nebraska State Normal at Peru. She received her medical education at the Women's Medical College of Pennsylvania, at Philadelphia, and graduated in 1875. She began the practice of medicine in Sabetha at that time and continued until the time of her death. She was a charter member of the Nemaha County Medical Society.

Dr. John L. Vickers, 66 years of age, died at his home in Wichita on April 20, 1938. Dr. Vickers was a native Kansan. He received his medical education from the Louisville Medical College in Louisville, Kentucky and was graduated in 1895. He had practiced medicine in Kansas for more than forty years. He was a member of the Sedgwick County Medical Society.

Dr. Charles E. Ward, 72 years of age, died at his home in Little River on March 30, 1938. Dr. Ward was born in Vinton, Ohio, and started the practice of medicine in Little River in 1892 where he continued until the time of his death. He was a member of the Rice County Medical Society.

---

## AUXILIARY

---

The Shawnee County Auxiliary, as representative of the Kansas Auxiliary, entertained Mrs. Augustus S. Kech, National President, as guest of honor at a luncheon in the Hotel Jayhawk, Topeka, March 2. Before the auxiliary luncheon was served Mrs. Kech addressed members of the Shawnee County Medical Society and guests at their luncheon, where she described the complexities of medical relief in Pennsylvania. At the auxiliary luncheon Mrs. Kech stressed the necessities of members becoming comprehensively informed on medical questions and tak-

ing this data into their lay organizations. The state officers present were: Mrs. R. W. Urie, Parsons, president; Mrs. C. O. West, Kansas City, secretary; Mrs. A. C. Flack, Fredonia, treasurer; Mrs. F. E. Coffey, Hays, president-elect; Mrs. J. B. Carter, Wilson, chairman of archives; Mrs. E. J. Nodurft, Wichita, exhibits chairman; Mrs. E. C. Duncan, Fredonia, legislative chairman; Mrs. L. B. Gloyne, Kansas City, organization chairman; Mrs. W. G. Emery, Barnard, publicity chairman. The luncheon was arranged by Mrs. F. C. Taggart, Mrs. C. E. Joss and Mrs. W. C. Menninger who also received as hostesses. Miss Firestone sang.

Maryann Firestone sang.

### PRESIDENT'S VALIDICTORY 1938

The curtain rolls down on a very happy and profitable year, made possible by each of you contributing your share.

I have been deeply impressed with the enthusiasm and interest of the women and the hearty support of the men throughout the state. Everywhere I have met with the most wholehearted cooperation. It is impossible even to mention the word "cooperation" without thinking of the members of the advisory council and Mr. Munns. To them goes my warmest gratitude and appreciation for their support. They have acted as our navigator, showing us the surest way to reach our destination with the minimum of storm areas.

We are fortunate in having Mrs. Frank Coffey of Hays, as our state leader next year.

I know that the support which has been accorded the work for the past twelve months will be extended to Mrs. Coffey in redoubled measure as the new auxiliary year begins.

Once again may I express my eternal gratitude to the individual auxiliaries and to each chairman and officer who has made possible the work of the state auxiliary.

It is with both satisfaction at the condition of the auxiliary work and regret at the parting with the opportunity of contacting directly such a body of splendid women that I bid you farewell as state president.

Mrs. R. W. Urie, President  
Kansas Medical Auxiliary

The Wyandotte County Medical Auxiliary met at the home of Mrs. C. J. Mullen Friday afternoon February 11. The president, Mrs. C. Omer West, conducted a short business meeting and election of officers: president, Mrs. L. B. Mabie; vice-president, Mrs. F. S. Cary; secretary, Mrs. H. L. Regier; treasurer, Mrs. J. H. Luke. The auxiliary especially enjoyed the honor of having the state president, Mrs. R. W. Urie, present. A tea and bridge followed the business meeting.

All the officers of the Ford County Auxiliary were re-elected at the February meeting in Dodge City. The officers are: Mrs. F. L. Dennis, president; Mrs. L. F. Schumacher, Meade, vice president; Mrs. X. F. Alexander, secretary; Mrs. V. B. Dowler, treasurer. A six months subscription to Hygeia was given to the following grade schools: Bucklin, all Dodge City elementary schools, Sacred Heart Parochial School, Ford, Meade, Satanta, Spearville, Cimarron, Greensburg, St. Johns Parochial, Spearville Junior High School, Dodge City.

# Copper Engraving Company

Artists Engravers

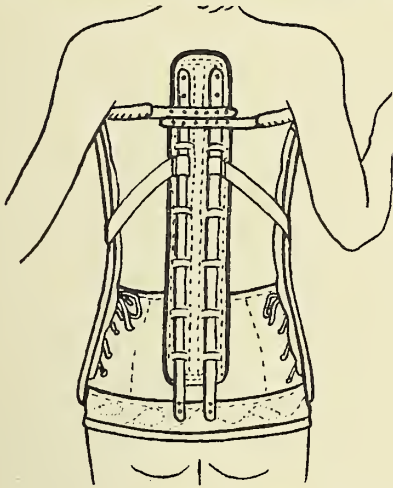
FOURTH FLOOR CUPPER BLDG.

Topeka Kansas



Send us your photo for portrait cut.  
Or for other plate needs.

## A COMPLETE SERVICE



We make all types of braces, splints, belts, elastic hose, crutches, arch supports and special apparatus.

If your patients cannot come to us we will come to them. Prices reasonable.

Camp's Supports

**Kansas City Brace & Splint Co.**

Phone Drexel 0640

847 Minnesota Avenue

Kansas City, Kansas

## The Mary E. Pogue School

Established 1903

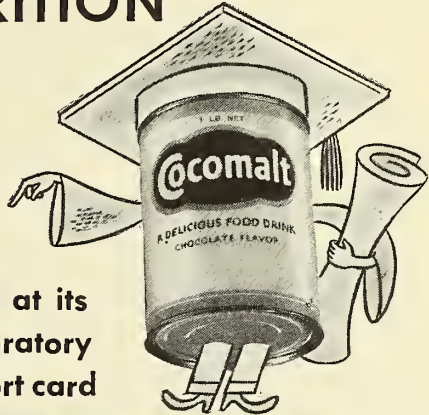
for exceptional children

Individual instruction for backward and problem children of any age. Separate building for boys. Epileptics accepted. G. H. Marquardt, medical director. W. H. Holmes, consultant. Gerard N. Krost, pediatrician.

Wheaton, Ill. Phone—Wheaton 66

40 Geneva Road

## This is the drink that studied NUTRITION



look at its  
laboratory  
report card

	1 Ounce of Cocomalt adds	1 Glass of Milk (8 Liquid Ozs.) contains	Thus, 1 Glass of Cocomalt and milk contains
IRON	0.005 GRAM	*TRACE	0.005 GRAM
VITAMIN D	134 U.S.P. UNITS	*SMALL AMOUNT; VARIABLE	134 U.S.P. UNITS
CALCIUM	0.15 GRAM	0.24 GRAM	0.39 GRAM
PHOSPHORUS	0.16 "	0.17 "	0.33 "
PROTEIN	4.00 GRAMS	7.92 GRAMS	11.92 GRAMS
FAT	1.25 "	8.53 "	9.78 "
CARBOHYDRATES	21.50 "	10.97 "	32.47 "

★Normally Iron and Vitamin D are present in Milk in only very small and variable amounts.

†Cocomalt, the protective food drink, is fortified with these amounts of Calcium, Phosphorus, Iron and Vitamin D.

With a "report card" like this, it's no wonder that Cocomalt has won wide acceptance among Physicians and Hospitals as the *protective food drink*. Each ounce-serving provides vital food essentials commonly lacking in the normal diet. But more. Cocomalt goes two careful steps farther.

Insuring that the *extra* Calcium and Phosphorus in Cocomalt will be readily "available" to the patient it also provides a clinically measured quantity of Vitamin D, derived from natural oils and biologically tested for potency. And to make sure that the 5 milligrams of Iron present in each ounce-serving of Cocomalt is "effective", that Iron is biologically tested for assimilation.

3 TIMES A DAY WITH MEALS. Many Physicians have commented favorably on the "prescription" advantages of Cocomalt. With it, patients can *drink* the nutrition they need. As a beverage, Hot or Cold, Cocomalt has a distinctive flavor, appeals to young and old alike. It combines to add milk to the dietary.

Cocomalt is inexpensive. Obtainable in 1/2-lb., 1-lb., and the economical 5-lb. hospital size purity-sealed cans at grocery and drug stores.

Cocomalt is the registered trade-mark of R. B. Davis Co., Hoboken, N. J.

## FREE! TO PHYSICIANS

R. B. DAVIS Co., Hoboken, N. J. Dept. 25-E  
Please send me FREE sample of Cocomalt.

Doctor \_\_\_\_\_

Street and Number \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



## PRESIDENT'S MESSAGE

To the Members of the Auxiliary:

I am looking forward with anticipation to the duties as your state auxiliary president. The state president office and the standing committees are a clearing house for all the counties and we hope to be of service to you in every way. I hope each member may enjoy a prosperous and successful year and that our auxiliary will continue to move forward.

It is upon the counties that the welfare of the organization depends, therefore, through your county public relations encourage the members to take a more active part in lay organizations interested in health education so that the lay people will be given information from the proper source.

There are many auxiliary members that have had many advantages so try to remember the new member that would like to be invited to share some of those advantages and your life will be fuller by sharing them with her.

I hope the membership of our organization will increase. The wife of every doctor that is affiliated with the American Medical Association should be a member of this auxiliary. Let each member take it upon herself to invite one new member into our circle this coming year.

The friendship in this organization I hold very dear and I pledge myself to make it a successful year which means that I will need the support of each and every member of the auxiliary to help me.

Mrs. Frank E. Coffey, President  
Kansas Medical Auxiliary

On February 14 the Sedgwick County Auxiliary meeting was held at the home of Mrs. Frank L. Menehan in Wichita at which Mrs. Maude Schollenberger, president of the Wichita Art Association, spoke on "Modern Glass."

The Central Kansas Auxiliary met at the home of Mrs. Alfred O'Donnell, Ellsworth, March 24. Routine business was transacted. Mrs. B. H. Mayer presided at the tea table. Nine members and two guests, Mrs. C. F. Taylor, Norton and Mrs. W. G. Emery, Barnard, were present. Mrs. J. M. Sutton, Lincoln, was elected to membership.

The February meeting of the Sedgwick County Auxiliary included a covered dish luncheon at the home of Mrs. F. L. Menehan. At the business meeting Mrs. N. C. Nash talked on the work to be done on cancer control by the Women's Field Army. Mrs. Maude Schollenberger gave an interesting talk on Jensen's silver, Swedish glass, and Copenhagen china.

At the Sedgwick County Auxiliary's guest day tea Miss Margaret Sandzen of Lindsborg displayed a number of Swedish costumes and silver pieces. Professor Earl Yust gave a number of piano selections.

Mrs. E. J. Nodurft, state membership chairman of The Kansas Congress of Parents and Teachers, was elected president of The Wichita Council of Parents and Teachers.

## FAIRMOUNT MATERNITY HOSPITAL

Offers a modern fireproof hospital for the seclusion and care of the unmarried mother. Adoptions arranged if desired.

FRED B. KYGER, M.D.

Obstetrical Director

1414 East 27th Street,

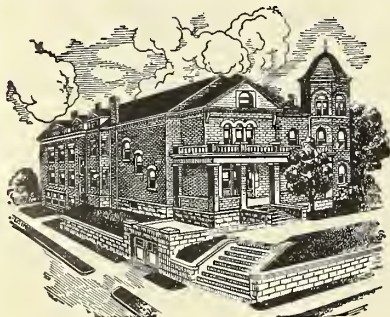
Kansas City, Mo.

## DEPENDABLE PRODUCTS FOR PHYSICIANS

Every product we manufacture is guaranteed true to label and of reliable potency. Our Products are Laboratory Controlled.  
Catalog mailed on request.

## THE ZEMMER COMPANY

Chemists to the Medical Profession    Oakland Station KA 4-38    Pittsburgh, Pennsylvania



Established in 1897

## Alcohol. Barbital. Morphine

Addictions Successfully Treated Since 1897  
by the Methods of Dr. B. B. Ralph

WRITE FOR DESCRIPTIVE BOOKLET

## THE RALPH SANITARIUM

RALPH EMERSON DUNCAN, M.D., Director

529 Highland Ave.

Telephone Victor 4850

Kansas City, Mo.

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

---

Volume XXXIX

JUNE, 1938

Number 6

---

## PRESIDENT'S ADDRESS

J. F. Gsell, M.D.

Wichita, Kansas

Mr. Chairman, Dr. Upham, distinguished guests, fellow members, ladies and gentlemen, I wish to take this opportunity to express my sincere appreciation and thanks for having been given the honor to serve as your President during the past year. While the office of State President is becoming more exacting as years go by, and the last year has been rather strenuous, yet it has been one of the happiest of my more than forty years in medicine. This has been due largely to the kindly and efficient co-operation given by every member who was asked to do something.

I have the honor now to say something in behalf of Kansas medicine in this, its 79th Annual Convention. Seventy-nine years means that we are no longer in the tyro class, but are beginning to get hoary with age. In 1859 a group of Kansas doctors, typical of the aggressive and rugged type of folks who settled these western plains, organized themselves and applied for a charter. The Kansas Medical Society was granted a charter by legislative act, so we are operating today under a charter granted by the Legislature of the Territory of Kansas. That is why your program is captioned the "Kansas Medical Society" and not the Kansas State Medical Society. The original charter provided that one President and six Vice-presidents should be elected annually. This was done for some years and then changed by the Society By-laws. Another regulation was included and that was that the Society had the power to fine any of the members the sum of \$50.00 for violation or infraction of its rules, by action of the Society. As far as I can learn, this regulation still is legally in effect. Kansas medicine was born at a most opportune time in the history of world medicine. I am sure we will all agree that more progress in medicine and science has taken place since Kansas entered the ranks than had taken place during all the preceding centuries. I wonder if there is not

some definite reason for this. I believe I will be able to answer this query with five words later on.

It is fair to state that in centuries past we had men, such as Hammurabi, Moses, Hippocrates, Socrates, Solomon, Aristotle, Celsus, Alexander, Galen, Galileo, who had as much brain power, intellect, intensity of purpose and idealism as any names we might select of men who are active in world affairs today. Why then the marvelous achievements since about 1850? I have asked this question a number of times recently and the usual answer is that we have the accumulated knowledge of the activities of these men over a period of centuries, which gives our people of today a great advantage. How did the experience of centuries help Pasteur in his work? What knowledge of history helped Koch discover the tubercule bacillus, Eberth the typhoid bacillus, Marconi the wireless, or Roentgen the x-ray, or helped any of the many original medical and scientific thinkers of today? It must be true that knowledge of the past centuries has had its influence upon the activities of men of action the last eighty years; but I feel this to be a small factor in our recent marvelous progress.

History is full of records of men who advanced new logical theories and facts in contra-distinction to old ones, and paid for their boldness by being ostracized by their fellows, condemned by church and state, expelled from home and country, and in many instances executed. Socrates was forced to drink the hemlock, Jno. Russ burned at the stake, and Galileo was forced to publicly retract his statement that the world rotated in space.

My thought is, that during earlier times men of ability and initiative were hindered in their thinking because of the fear of retribution on the part of the church and state and by society at large. Who knows? Galileo might have been the Edison of his age had he been encouraged and honored for his efforts instead of being ridiculed and punished. Since the Renaissance, Harvey, although recognized as a great teacher and philosopher, when he discovered and demonstrated the circulation of blood, instead of being honored and lauded for his achieve-



ment, was ridiculed by his fellows, criticized and condemned by both church and state; Pasteur and many others received similar treatment. As late as 1848, when it was definitely proved and demonstrated that ether would put an individual to sleep and painlessly permit operation upon the body, these men were ridiculed by their fellows, condemned by the church, which said that "This was of the devil and could mean no good; that the scriptures taught that men were to suffer and that child birth should be accompanied by pain and travail." Today it is difficult to realize that eighty years ago something was offered to the world that would do more to advance human happiness than probably any single thing that had ever occurred before, yet men of intelligence condemned it. Within a few years, however, the use of general anesthesia with ether and chloroform, and local anesthesia with cocaine became general, and for the first time in the history of the world operative work was done painlessly. The introduction of this general anesthetic around 1850 was about the last time that men were punished by church and confreres and discussed by state. At just about this date men were being permitted freedom of thought and action. When civilization reached the point where the powers of the state, the influence of the church and society at large lauded achievement, encouraged research and investigation, and honored men of action, the world began to move. How fortunate are we of this generation to have lived at a time such as this. I believe that the answer to this marvelous progress is included in the five words "Freedom of thought and action." At no period of the past centuries was freedom of thought and action permitted. Hippocrates and his co-worker made a deliberate attempt to divorce medicine from the dominion and influence of church and state so that they might develop their medical problems in their own way. Considering the times these men succeeded marvelously, so much so that since that time Hippocrates has been honored as the Father of Medicine. Yet it took more than 2000 years before his fond dreams really came to pass. As long as the people of the world enjoy this freedom, we will continue to achieve undreamed of heights. Take from the civilization of today this freedom of thought and action, and progress will cease. When progress ceases, we soon will go into decline. We can not remain static. Is freedom of thought and action being throttled in the world today? I noticed a statement in the press a short time ago where Dr. Fossick, Chairman of one of the largest of our foundations which awards millions of dollars annually for outstanding individual achievements in all parts of the world, said that the Board had removed from its list individual citizens of certain countries be-

cause they could not qualify, as freedom of action and thought had been taken from them.

Is there a tendency in many parts of the world to curtail freedom and introduce a sort of managed system? We hear in our own land from the press, radio and from men in high places, that we must prepare to adjust ourselves to a new sort of civilization; that we are facing new economic problems and are entering into a new era. What sort of new economic and cultural plans have been put into operation? The only new plans I know anything about are those adopted by Russia, Germany, Italy, and Spain. In each of these a new and different type of civilization has been set up. In each type, freedom of thought and action is being stifled and as surely as this continues, progress will cease. I cannot conceive of any new plans of action for which we are being asked to prepare that will not have as one of the chief objectives a form of managed and dictatorial type of government. If the pages of history teach us anything, it is that the moment we stifle initiative, progress wanes. We believe that the people of this country of ours have received better and more humane medical care than those of any other countries in the history of the world. This is true of all classes, rich, moderate, or poor. Here in Kansas under the guidance of our Medical Economics Committee, you doctors of Kansas have been giving much thought and study on how to further improve our service to the needy of the state. As doctors we are qualified better than any other group to work out medical economic problems which are confronting society due to the peculiar conditions of the time; yet, I wonder if there has not been made a deliberate studious effort to control and manage the medical activities of this country by men of education, intellect and resourcefulness with plenty of money at their command. I wonder also if this influence is emanating from the management of some of our large foundations, whose financial support is from men who have amassed their millions, who are getting older and are inherently religious, and who are attempting to glow to glory on a pathway of gold laid on a foundation of the financial wrecks they have left in their wake.

Why all this tirade about the past ages and the growing tendency for managed lives in our present time in such an official address? If the foregoing remarks mean anything, they mean that we in Kansas must be awake and alert to the changed and changing conditions that confront us as men of medicine. We must oppose by all the power we have individually and collectively every attempt that may be made to bridle and control the freedom of thought and action of the medical men of this or of any other state. However, when certain measures

by legislative action have become laws of the land, it is our duty to obey. Laws were enacted at our last State Legislature that have a direct bearing upon the medical affairs of this state. They probably are not all good or all bad; but good and bad, the laws are here. Your executive office has encouraged the members of our Society to cooperate to the fullest extent possible in the carrying out of these new provisions. We have worked harmoniously with the various agencies of the state in formulating workable plans of action. We owe a lot of gratitude to the new State Tax Commission, the State Social Security Commission, the State Health Department, the State Legal Department, and various other state agencies for their efficient cooperation in many activities. The people of Kansas are indeed fortunate insofar as these various agencies have been working harmoniously together for the greatest good.

In my first official letter in the Journal, I said that I planned not to ask any member to serve on more than one committee, and that I would not ask any officer of the Society to serve on any committee, as they already had definite duties to perform. In carrying out this plan, a number of changes in committee appointments had to be made. At this time I wish to express my sincere thanks for the efficient and constructive work done by the various committees. I have not time to recite the achievements of each committee; but feel sure never in the history of Kansas medicine has there been so much time given and new and constructive activities instituted as have been done by these different committees during the last year. I call your attention to the reports of the committees printed in our Journal, which you have just received. The membership of the state owes a generous vote of thanks to those men who have given of their time, and money, to carry on. Personally I have not words to express my appreciation and thanks for these faithful services during my administration. It would be unkind if I did not say something about the work of our Executive Secretary. Clarence doesn't want much laudation, as he is naturally modest. No one knows, unless closely associated with him, the constructive work he is doing on behalf of Kansas medicine. I want to say that the greatest day in Kansas medicine was the day the committee employed Clarence Munns as our Executive Secretary. As far as I know, there are no sore spots in our state organization. Every member is willing to do his best. As long as we are willing to work together and support our executive officers in their efforts, Kansas medicine will become increasingly more potent in the general welfare of the state. I bespeak for my successor, Dr. N. E. Melenkamp, the same efficient and kindly support you have given me.

As your retiring President, I want to make this final plea, that we doctors of Kansas gird on the armor of intelligent thought, idealism and intensity of purpose, and be ready to go into action with all the power we have to resist any attempt to interfere with freedom of thought and action, which is the heritage of our generation.

## THE CASE HISTORY IN HEART DISEASE\*

Philip Morgan, M. D.

Emporia, Kansas

We Americans, sensing the value of planning, remind ourselves that in any diagnostic problem there are two general types of information to use in the study: The subjective and the objective. We further remind ourselves that all ailments that human beings may present have three fundamental components: Organic or structural; physiological or functional; and psychological. We know that the very diagnosis of cardiovascular disease far too frequently incites fear and fright in the mind of our patient because of the daily newspaper accounts of heart deaths. Cognizance of these axioms (for we might call them axioms) is essential and fundamental in handling people with heart disease. Definitive subjective and objective information supplies facts for a diagnosis which enables us not only to arrange a satisfactory scheme of management, and make more accurate prognoses, but also to explain the nature of a patient's ailment to him, hence helping him to escape the futile abyss of fear of the unknown.

"Let him who is without error make the first criticism" would be a good maximum for physicians when commenting on their colleagues to laymen, but within the profession where the constructive aim of our discussion is appreciated, such comment should be encouraged. The history of persons suspected of having cardiovascular disease is usually neglected. The history frequently provides more evidence than any other part of the study in helping us make a diagnosis.

The statement of a cardiac diagnosis should include etiology, anatomical change, physiological alteration, and present functional capacity. A note should also be made even if the examiner fails to find heart disease but believes it possible or potential in that case.

\*Presented before the Shawnee County Medical Society (Academy Section on Cardiology) February 28, 1938.



Not alone is the history as exact data valuable in painting the true subjective aspects of the illness, but its survey describes the person who is complaining better than our most delicate instruments or our most skilled writers.. When the physician shows personal interest by giving some undivided time to the patient's recital of his story and questions him regarding it, the fact is of more than incidental importance that the physician then and there gains the patient's confidence and silently persuades him he has finally found a sympathetic, understanding doctor. For these reasons I have decided to discuss what seem to me some important phases of the history, or we might put it, of the subjective aspect of persons suspected of having cardiovascular disease.

Patients say "I have heart disease" or "I don't have anything wrong with my heart—I have a good heart" or "I have a weak heart" or "I've got leakage of the heart"—and all of us could add many other phrases we have heard in the first interview with our patient. Challenging in our own minds the veracity of these statements, we must have a plan for reaching our own conclusions. Every heart examination should not, or at least need not, be all inclusive, but should always include history and physical examination. From these our judgment dictates which and how many other studies should be pursued.

To digress a moment, let us enumerate the objective forms of investigation available in addition to the physical examination. Urine examinations should be routine; blood counts deserve to be frequent; blood cultures are occasionally indicated; the Kline blood test for syphilis has become a favorite because of its sensitiveness and ease of performance and a Wassermann can be used to check questionable cases, but one should remember cardiovascular lues does not always give a positive serology; the erythrocyte sedimentation time is a simple procedure more often useful than made use of; blood chemistry, especially for sugar and N.P.N., should be remembered when urine studies or history have given an indication; vital capacity determinations might often aid, if they were used; pressor cold tests for eliciting potential hypertensives promise much; electrocardiographic studies are indicated when arrhythmia or myocardial damage is suspected or when digitalis therapy needs rechecking. A normal electrocardiogram even including chest leads does not rule out heart disease; x-ray studies—preferably fluoroscopic, so that the oblique positions with thick barium in the esophagus can be seen are of great help in confirming pericardial

fluid, cardiac and aortic size, and by certain configurations aid in deciding which valve is affected; a study of the basal metabolic rate is often indicated; direct venous pressure estimations are sometimes indicated. In vascular disorders oscillometry, arteriography, and delicate skin temperature recording devices are used in thoroughly equipped centers. I am not familiar with the instrument known as the Cardiometer which is being introduced by the commercial concern which builds it. A modification of the electrocardiograph making use of a screen which fluoresces in the dark for a minute or so is available, as are sound photographing instruments. Other mechanical aids, old and new, no doubt exist—such as McKenzie's pulsograph, now little used, and the new blood pressure table which I do not believe has reached a practical stage in its development.

Regardless of the occasional great value of all of these or any one of these procedures, none of them can tell if the patient has anginal attacks with effort, none can tell how much exercise tires him, and none of them tells us his father, grandfather and others did or did not have cardiovascular disease. The history of a person coming to us because he or someone else suspects heart disease, should be as carefully and completely worked out as if he had come to us for a general complete examination, but I intend to dwell in this discussion in detail only with parts of it. The original draft of a history should, I think, be under headings, but the patient should be allowed all the freedom he desires in narrating what he knows. When, as sometimes happens, I learn in the first short interview that the patient has an extremely long story, I suggest he write and bring or send the account as he knows it. He understands I will study it carefully and reorganize it to suit my needs. Whenever possible the phraseology or vernacular of the patient should be retained in our own records.

Because of habit I attempt to select what seems the chief complaint, and follow that short statement with a chronological review of the history of the present illness which has as its latter half a summary of systems with notes on special senses, weight, joints, muscles and general or special aches. Following this I put past medical history with dates; then family history, with special emphasis on any conditions which indicate cardiovascular disease; then the social history, which should include habits and hours of sleep, eating, physical activities, avocations, worries, the use and amounts of tobacco, alcoholics, and coffee, and a brief sketch of his biography.

In the history of the present illness a number of questions seem especially pertinent. Whether a person can perform his usual physical tasks or sometimes with the same ease as in the past is more informative than whether he can carry a sack of sand up forty steps without dyspnea or discomfort. Of course a "hod carrier" could, even though he had some forms of organic heart disease, carry the sack of sand better than most of us who have normal hearts. To run repeatedly over a two or three step rise would tire many of us with laughing at ourselves. That the housewife notices sweeping her kitchen or running up or down stairs is becoming an effort for her is the type of information we want. If she does not have stairs in her home or where she frequently goes, it is not so significant that she was seen "catching her breath" at the top of a long flight of stairs. Heart disease is important in proportion to the degree it limits the activity of the man who has it. For compensation he needs usually a well developed myocardium with good tone and this is said to go parallel to skeletal muscle development and tone. A young man, whom I first knew when he entered college several years ago and whose case I often mention, could run a mile without fatigue and his pulse return was excellent despite the fact that he had a chronic rheumatic mitral and aortic valvulitis and a huge heart. He had before I first saw him, engaged in heavy work to the point of developing a fine physique with excellent skeletal musculature. Signs of impaired functional capacity in him cannot be judged by the same standards used on an eighteen year old girl, the pampered baby of the family, who has the same valvular pathology as the young man. It is therefore apparent, as Sir Thomas Lewis has told us, that no fixed rule can be set down for a standard of physical effort. Each patient is his own standard, and sometimes he is not as able to judge his changing functional capacity as is his wife, brother, or friend.

We might often profit by a short interview with someone who knows the patient well. A middle-aged salesman whom I saw failed to admit that he could not walk to the post office, a distance of three blocks from a store he visited, without stopping several times to relieve an unbearable substernal pain; but his wife told that important part of his story. Even third party information may be misleading when we ask if the patient has been running a temperature, since as a rule, people do not take rectal temperatures and if dyspnea and mouth breathing existed at all, the oral temperature is apt to be unreliable.

It is largely an indication of individual sensitive-

ness, I was taught, whether a very rapid or slow or an irregular heart beat is perceived by the patient. By far the majority of my patients, however, answer the question correctly, though, for instance, they have said: "It beats so hard" or "it turns over" or "it drops a beat" or "every now and then it beats very hard" or "it suddenly seems to run away with itself for a while—then as quickly stops doing that and though I'm not conscious of it anymore—I feel weak for hours." The last description came from an eighteen year old girl whom I assumed had had attacks of paroxysmal tachycardia. A few weeks after that I saw her in such an attack—verifying the supposition. The somewhat similar history from a fifty-five year old nurse with myocardial changes prompted me to assume she was having paroxysmal attacks of auricular fibrillation and an occasion came when I saw her in an attack and my suspicions were confirmed. Persons with sinus bradycardia are usually aware of it and we do well to remind ourselves that sinus bradycardia which starts under thirty years of age without evidence of disease forecasts longevity for the patient as well as indicating excellent circulatory reserve.

Usually we do not need to ask the patient about edema, he has noticed that too and it is one of his reasons for seeing us.

One question I find we do have to ask is that concerning nocturnal restlessness, and since this symptom has been so well shown to be a relatively early evidence of left ventricular fatigue we should never neglect to ask if the patient finds himself awake in the night for no apparent reason. The time at which this experience started gives us a clue as to when function impairment began. Hand in hand with nocturnal restlessness as a sign of left ventricular fatigue is Cheyne-Stokes respiration. I do not refer to that which is seen all the time in a dying person but to that variety which only an astute nurse will observe during the patient's sleep. Often the patient's wife will volunteer the information (if given a lead and a chance) that her husband seems to almost stop breathing sometimes in his sleep, then with a start or gradually and easily will breathe deeply for a while—and this sequence repeats itself. The number of pillows for rest and whether he can sleep on his left side are not as significant as restlessness in the night, but they do afford valuable suggestions concerning the cardiac functional status.

When the patient complains of pain in his chest, neck, shoulders, or arms, it should not always be thought to be due to his heart. Many attempts to classify this true cardiac pain have been made. I



saw a man with a ruptured heart in an area of myomelacia cordis who had had little or no pain—he was a railroad section hand and dropped dead on the job. A woman who had required at times narcotics when nitrites failed to relieve her severe substernal pain died of an unrelated cause a few weeks later and gross dissection failed to disclose heart pathology. A retired sheriff died in his sixties with the only complaint being what he insisted was “rheumatism in my left shoulder;” but at necropsy his pericardial sac was filled with blood and he had multiple small rents thru an area of myomelacia cordis. These experiences suggest the varied significance of pain in or around the heart. In another instance a young man was seized with upper left chest pain later demonstrated as probably due to a spontaneous partial pneumothorax. A fat man of forty-four presented a typical group of herpetic vesicles in the left posterior axillary region in the fifth interspace a day or two after he came to see me because he was sure he had something wrong with his heart. Physicians have a right to hesitate putting too much specific diagnostic import on chest pain though it obviously is an important symptom. Soreness in the skin over the pectoral muscles as well as tenderness in those muscles has not proven significant. A twenty-five year old school teacher started wearing a brassiere and the soreness which she thought was due to heart trouble vanished.

In the past we have all read of heart disease masquerading as abdominal pathology. Several years ago a physician patient of mine thought he had an acute abdominal condition when he had a coronary occlusion, since the distress was all abdominal for the first day or so. Digestive dysfunction reminds me of an unusual case seen within the past year. The man was a husky, stocky, middle-aged farmer whose symptoms of ulcer had been investigated elsewhere several months before by roentgenological studies but no ulcer was demonstrated. His illness when his physician brought him in to us was of several days duration. Pain in the epigastrium referred to the left shoulder—a tachycardia of 130, an ashen hue, and a history of rather sudden onset with vomiting were the facts immediately learned. Heart sounds were distant; outlines by percussion or x-ray were impossible because the patient insisted on bending forward, despite three-fourths grain of morphine. An electrocardiogram showed marked right axis deviation which I was unable to understand. He was referred to surgery with a diagnosis of ruptured gastric ulcer and was opened. The surgeon reported rupture into the lesser sac. A futile attempt was made to close it. Later at post

mortem the right axis deviation of the electrocardiogram was explained by the heart being almost completely displaced to the right by a herniation of the contents of the lesser peritoneal sac just to the left of the vertebral column up some seven or eight inches into the thoracic region. The herniation had a diameter of about two inches.

Abdominal distention and gas, which deserve entire seminars themselves, often precipitate cardiac dysfunction. A barber who had been taking quinine for premature beats had never been asked about his abdominal distention, and with attention to it has been able to do without quinine now for several years. It was a satisfaction to hear Dr. Alvarez of Rochester say to a group last spring that he had no hesitancy in suggesting and approving bowel irrigations as a means of eliminating flatus. He cited the case of a woman who had used bowel irrigations several times daily for over ten years without impaired bowel structure or function. In people admitting belching and passing much flatus one often finds, on inquiry, the diet has contained much roughage. Large meals have often been a cardiac patient's downfall. A burly six foot farmer of forty-two with an old rheumatic history was seen in several attacks of congestive failure over a two year period. Each attack was precipitated by a big meal. His fatal attack followed a family dinner on Christmas day.

Significant data in the Genito-Urinary Review concerns particularly the genital or we might say the endocrine history. Various complaints incriminating the circulatory system are heard with other menopausal symptoms and they offer fine opportunities for help by available hormonal preparations. Recently a woman of fifty-two said “they tell me I have heart disease . . . I was having numbness in my left arm so I couldn't even peel a potato and some misery in my lung . . . The doctor said I had a murmur due to leakage of the heart and it was behind my trouble.” Questioning revealed her unpleasant sensations were not limited to the areas mentioned. Various bizarre symptoms had appeared since a hysterectomy four years ago at the hands of the man seen recently. Theelin relieved the symptoms said to be due to “leakage of the heart” and the murmur the surgeon had heard was not heard when she was examined two months later.

It is important and encouraging, in considering any actual heart case, that the patient noticed effort tiring him at an approximate year when he had greatly increased his weight. Studies in various centers have indicated obesity should be avoided in all cardiacs. Over two-thirds of a series of people

with various types of abnormal cardiac function which have come to my attention have been overweight. The weight history should never be neglected. People commonly say, "my weight is a family trait." But as they learned the language, religion, and politics of their parents, it is probable that the eating habits of their forefathers were also acquired, hence the weight tendencies. This statement is borne out by observation.

The past medical history is important in supplying a primary or secondary etiological factor. A good number of conditions which the history might disclose are generally accepted as primary or contributing etiological factors in heart disease. Among those are rheumatic fever, chorea, syphilis, diphtheria, thyroid disease (adenoma, Graves or Basedow's disease, myxedema), hypertension, arteriosclerosis, anemia or other blood dyscrasia, bacterial infection (severe or repeated), pulmonary emphysema, toxic agents (tobacco), trauma, psychoneuroses, biliary tract disease, obesity, and vitamin deficiency (particularly vitamin B). We have all been adequately coached to ask not simply if the patient has had rheumatic fever, for it is common knowledge that some of those cases present little if any joint symptoms. We have also been taught to ask when the patient had his genital sore and not if he ever had one. Many people flippantly say they have never been sick, but when asked to recall for us each illness from earliest childhood which has necessitated bed rest or medical attention—they do recall having had some significant illness. A case cited in a recent monograph of a young college athlete who by chance was found to have a complete A-V block typified such a situation. The young man recalled that several years before he had had diphtheria which was no doubt the cause of his conduction system injury. An interesting case was recently related to me of a fight referee in our state who died suddenly several months following a severe blow over his precordium. One of the untrained performers accidentally landed a wild swing on the official and did not know it. At the time of the blow the referee was knocked down and was obviously "out" for a minute or so. The fight went on with Jess Willard, who was an alternate official, taking the unconscious man's place. Whether the unfortunate referee had a concussion of his heart no one will ever know but my physician friend suggested the possibility. Since the outstanding work of Beck, the surgeon of Cleveland, on cardiac surgery and trauma to the heart, we must remember such possibilities. In the aged—it has been shown, by LaPlace and Nicholson—the effects of prolonged

bed rest can do great damage to the peripheral circulation, and of course this produces central circulatory problems. In my files is an electrocardiogram showing auriculo-ventricular dissociation and myocardial damage in a young woman who presents no etiological factor unless I am to assume it resulted from repeated general anesthesia. She had twenty-five or thirty general anesthetics in a few years time to have an ankylosed shoulder manipulated.

The family history as mentioned in the introduction may give valuable data. The fine work of Hines of Rochester has indicated the familial tendency to hypertension. In line with that, many physicians feel they have observed a definite family tendency to certain systemic disturbances such as families with cardiovascular diseases, and others with various forms of gastrointestinal disorders. "Sudden deaths" and "strokes" imply vascular disease as do such statements as "dropsical"—when patients give the cause of death of relatives. Patients who admit having had contact with a tubercular have occasionally spurred the physician to increased effort in his search for such disease in the suspected cardiac.

The social history, also referred to before, is a very important part of his history. A young man whom I once knew and cared for in his final illness, finally died a cardiac death. He had had a series of illnesses which injured his glomeruli and precipitated hypertensive heart disease on a heart which he had abused by multiple excesses in living with little or no rest over a period of years. The psychoneurotic element, which can no doubt play an important etiological role, is elicited in a good social history. Conflicts in living prevent adequate rest, make for the condition people call "nervous" and especially in persons with poor cardiovascular ancestry predispose to and even precipitate and aggravate hypertension and angina. The common acceptance of this fact was illustrated in the movie "Lloyd's of London" when an irate old man, in a violent demonstration, dropped dead a few minutes before twelve when he heard one of his enemies in a jest had bet against his living longer. One should remember that the "irritable heart" of DaCosta in civil war times, "soldier's heart" and "effort syndrome" during the great war, and neurocirculatory asthenia, which many know the syndrome by, is significant. People, thousands of them, are incapacitated by this functional disorder of the circulatory system. No objective information compares to the history in the diagnosis and care of this malady, whether it exists alone or in association with organic



heart disease. Recently Ginsberg again called attention to neurocirculatory asthenia as being "quite common in civilian life, occurring in women and children as well as men . . . occurring more frequently between the ages of twenty and forty." He directs particular attention to all phases of the anamnesis.

In eliciting symptoms of positive value, one must also properly evaluate those of little consequence as concerns the heart. Sighing, fainting, dizziness, roaring or ringing in ears "tender flesh over the heart," "gas on the stomach and belching," "lump in throat," "cough, and weak attacks," spontaneous attacks of dyspnea, "burning pain around chest," "annoyance—not pain, in left shoulder and arm," "hearing the heart beat on the pillow at night"—all these and others are among the outstanding complaints given by persons who were concerned about their hearts, but in whom no heart disease was found on careful study. Sighing, for instance, in my experience, usually marks him who does it as a restless, bored, introspective person with a large psychological component in his illness. A woman, who began having dramatic hours when she fought to get enough air at each breath, was cured after an examination, a talk, and a few days on a sedative, though she was sure her heart was causing her trouble.

#### CONCLUSION AND SUMMARY

All data in case study is subjective or objective.

Six questions should be answered in making a diagnosis of heart disease: What is the etiology; what anatomical changes exist; what is the physiological abnormality; what is the functional capacity of the patient; if no heart disease exists is it a possibility or is the patient a potential heart case? The etiology and functional capacity and whether the patient should be called a possible or a potential cardiac are decided largely from the patient's history.

An outline of the various objective means of study used in suspected cardiacs is presented and in contrast an outline for history taking is given.

The past and present medical, the social, and the family histories are discussed, with brief examples cited when possible.

#### BIBLIOGRAPHY

1. Beck, Claude S.: Recent Advances in Cardiac Surgery, Transactions of Kansas City Academy of Medicine, 1935; 1936; 1937, 145-156.
2. Lewis, Sir Thomas: Diseases of the Heart, New York, The MacMillan Company, London; MacMillan and Co., Ltd., 1933.
3. Levy, Robert L.: Diseases of the Coronary Arteries and Cardiac Pain, New York, The MacMillan Co., 1936.
4. Maher, C. C., Electrocardiography: Wm. Wood and Co. 1937.
5. New York Tuberculosis and Health Association; Criteria for the Classification and Diagnosis of Heart Disease.
6. White, P. D.: Heart Disease, MacMillan and Company.

7. Alvarez, W.: Round Table Discussion, American College of Physicians, St. Louis, 1937.

8. McEwen, F. J.: Personal Communication.

9. Sherf, D.: Communications in Vienna, 1932.

10. Ginsberg, A. Morris, Kansas City, Mo.: "Differential Diagnosis in Primary Hyperthyroidism, Incipient Tuberculosis, and Neurocirculatory Asthenia", The Journal of the Kansas Medical Society, November 1937, 457.

11. Hines, Edgar A. Jr.: "The Hereditary Factors in Essential Hypertension", Annals of Internal Medicine, Vol. 11, No. 4, October 1937; 593.

12. LaPlace, L. B. and Nicholson, J. T., Philadelphia: "Prolonged Recumbency as a Contributory Cause of Death in Elderly Persons", A.M.A., Journal, Vol. 111, No. 4, January 22, 1938, 247.

13. Morgan, P. W.: "The Status of Persons with Sinus Bradycardia", The Journal of the Kansas Medical Society, November, 1936.

## THE USE OF METRAZOL IN THE TREATMENT OF SCHIZOPHRENIA

Ralph M. Fellows, M.D.\* and

Marshall E. Hyde, M.D.†

Osawatomie, Kansas.

This is a preliminary report on the use of metrazol in the treatment of schizophrenia. Material presented includes the technic employed, observations, experiences, and results obtained in a group of eighteen patients treated during a four months period ending February 15, 1938. A simple presentation of findings is attempted and we have no desire to participate in the insulin-metrazol controversy that is looming up just now<sup>1,2</sup>.

Frequent reference is made in psychiatric literature to the high incidence of schizophrenia and the large and constantly increasing number of hospital beds that are filled by chronic schizophrenic patients who thru long years of hospital residence have established themselves as permanent residents in the chronic or custodial wards of mental hospitals thruout the country. Statistics will not be repeated here, but proper recognition must be given to the magnitude of the problem presented in the management of schizophrenia. In spite of the all too prevalent belief that schizophrenia is incurable, a persistent therapeutic assault has been made against this insidious and malignant mental disease. Each of several plans of treatment has been popular for a time and then passed more or less into discard. Fairly recent methods of treatment for schizophrenia include the removal of foci of infection, fever therapy, endocrine therapy and psycho-therapy. More recent additions to the older plans of treatment include insulin shock therapy and metrazol. The former is enjoying rather widespread popularity and has been used in this hospital for several months as previously reported by Russell and Fellows<sup>3</sup>.

\* Superintendent of Osawatomie State Hospital, Osawatomie, Kansas.  
† Staff Physician of Osawatomie State Hospital, Osawatomie, Kansas.

The use of metrazol in the treatment of schizophrenia is no longer new. According to reports available this treatment was first used by Meduna<sup>1,2</sup>. His early work was promptly followed by reports of other foreign workers<sup>4,5,6,7</sup>. These reports are uniformly encouraging. Fatalities or ill effects of any kind are seldom reported and marked improvement in as many as fifty per cent of the patients treated is not unusual<sup>4,5,7</sup>. One interesting report is that of a laboratory worker who committed suicide by drinking ten per cent metrazol solution<sup>8</sup>.

Metrazol, formerly called cardiazol, is the trade name for pentamethylenetetrazol. It is council approved and recognized as a reliable drug when used as a cardiac and respiratory stimulant. The beneficial effect of this drug in profound barbitol or anesthetic depression has been reported<sup>9,10</sup>. Stoland and Ginsberg<sup>11</sup> conclude that metrazol has no important effect on coronary flow, blood pressure, or heart rate. They conclude in part: "The data on the intact animal warrants the conclusion that metrazol has no important effect on coronary flow, blood pressure, or heart rate. In a consideration of the data on the heart-lung preparation, the late increased coronary flow can be attributed to a toxic action of metrazol."

Thus far, patients selected for metrazol in this hospital are patients who have had a relatively long hospital residence and appeared to be well on the road to becoming custodial patients at the time that treatment was started. We have endeavored to use patients who have been here more than six months and less than one and one-half years. Considerable deviation from this plan has been necessary however, and the approximate duration of hospital residence for each of the patients is given in Table I. We have intentionally selected patients who are apparently well established as custodial cases and the least promising from a therapeutic standpoint with the exception that patients known to have undergone marked mental deterioration or to have been feeble-minded prior to the onset of the psychosis have not been used. We have not, as yet, had the privilege of using the treatment on more than a very few early or acute cases, or cases that have been in the hospital less than six months. Four patients are included in this series who had previously received insulin-shock therapy.

Contraindications as presented by Meduna and summarized by Friedman<sup>12</sup> are: "(a) Failing or decompensating cardiovascular system. (b) Any acute febrile condition. (c) Menstruation." In addition to these, Friedman<sup>12</sup> suggests the following: "(d) Severe anemia or cachexia. (e) Any abnormality

of the blood or urinary constituents. (f) Previous history of severe cranial injury with subsequent unconsciousness." A later report by Friedman<sup>13</sup> gives results in forty cases treated by metrazol administration.

In the management of the patients, a definite program is followed for the purpose of maintaining definite alkalinization of the patients. This includes a period of observation which amounts to about a week, usually, before beginning metrazol injections. During this period of time observations have been made on the patient's mental condition, his general attitude, behavior while on the ward, and his general physical condition. During this period he is placed on an alkalinizing diet and receives large doses (twenty to thirty grains three or four times daily) of soda bicarbonate regularly. The diet for these patients has been carefully worked out by a trained and experienced dietitian. In this hospital, separate tables are maintained for metrazol patients. On these tables are served only the special alkalinizing diet that has been planned for them by our present dietitian. The efficiency of the alkalinization program is determined regularly, daily if the urine has been acid, and before each treatment if the urine has been alkaline on preceding tests. Litmus paper was used in the beginning but we use nitrazine paper now. This paper gives a satisfactory estimate on p-H's ranging from 4.5 to 7.5. Patients are encouraged to drink plenty of water at all times but fluids are not actually forced. In the administration of the drug, the plan ordinarily used elsewhere is followed. We use the ten per cent solution and have been making our own solution from the one and one-half grain hypodermic tablets because of the money that can be saved. We use a five, ten, or twenty cc. syringe, depending upon the dose to be given. We prefer and ordinarily use an eighteen gauge needle for male patients and a twenty gauge needle for female patients. These needles permit a rapid injection of the drug which is important since rapid injection produces a good epileptiform seizure with a smaller dose than would result from injecting the same amount of the drug more slowly.

The usual reaction is the onset of a seizure ten or twelve seconds following the completion of the injection. The onset is ordinarily with a marked tonic spasm of the entire body, including a tonic yawn, that may last from two to six, and occasionally, ten seconds. This is often preceded by coughing and infrequently a patient will cry out immediately preceding the onset of the seizure. The tonic spasm is rapidly replaced by repeated clonic



TABLE I

Metrazol Number	Patients' Initials	Sex	Age	Psychiatric Classification	Duration of Symptoms Before Metrazol	Duration of Present Hospital Residence when Metrazol was Started	Previous Response To Therapy	Duration of Metrazol Treatment (Days)	Number of Metrazol Injections	Number and Nature of Reactions	Maximum Single Dose of Metrazol	Total Number of Grams of Metrazol Given	Change in Weight (Lbs.)	Results
A. IMP 2.	ROVEDA W.C.	M.	PAR 27	OLED: Schiz. Catatonic	21 months	9 months	Temporarily improved after Insulin then relapsed.	23	20	6 GM 3 PM 4 NR	8 cc.	15.6	+ 7½	Improved after second treatment.  Paroled 11-24-37.
9.	E.Z.	F.	48	Schiz. Catatonic	16 months	4 months	Improved then relapsed.	42	19	15 GM 3 PM 1 NR	8 cc.	11.0	+ 8	Improved after 6 days; very good after 15 days.  Paroled; maintaining improvement.
B. IMP 5.	ROVEDA J.G.	M.	UFF 26	NTLY TO JUSTI Schiz. Simple	16 months	4 months	None	91	37	26 GM 6 PM 3 NR	13 cc.	36.0	+14	No sudden change; only gradual improvement.  Moderate; gradually developed improvement.
12.	D. I.	F.	31	Schiz. Catatonic	7½ months	7 months	None	28	14	10 GM 0 PM 4 NR	7 cc.	7.4	+13	Definite after third seizure.  Initial improvement maintained. Ready for parole.
14.	L.C.	F.	20	Schiz. Catatonic	8 months	6 months	Slight improvement after Insulin then relapse.	41	17	14 GM 1 PM 2 NR	7 cc.	6.7	+19	Moderate at the end of 2 weeks.  Marked improvement. Does stenographic work.
18.	J.M.	M.	38	Schiz. Catatonic	4½ months	4 months	None	31	9	9 GM 0 PM 0 NR	7 cc.	4.4	+21	Marked improvement following third seizure.  Improvement sufficient to justify parole.
C. IMP 4.	ROVEDA O.D.	M.	LAT 37	ER RELEASED: Schiz. Catatonic	6 months	4 months	None	92	34	28 GM 4 PM 2 NR	11 cc.	25.4	+26	Marked early improvement with subsequent relapse.  Final condition unimproved.
10.	M.W.	F.	17	Schiz. Catatonic	11 months	8 months	Improved then relapsed.	72	28	23 GM 0 PM 5 NR	11 cc.	19.7	+ 7	Definite after 2nd convulsion.  Relapsed after initial improvement.
D. DE 3.	FINITE I P.C.	M.	RO 25	EMENT: Schiz. Hebephrenic	18 months	7 months	None	95	41	32 GM 6 PM 3 NR	12 cc.	36.2	+ 6	Slight improvement at end of 2 weeks.  Moderate improvement accessible and cooperative now.
6.	P.M.	M.	38	Schiz. Catatonic	8 months	7 months	Slight improvement then stationary.	89	38	24 GM 5 PM 9 NR	13 cc.	38.2	+ 3	Moderate definite improvement.  Definite moderate improvement; not completely recovered.
7.	G.O.	M.	24	Schiz. Simple	27 months	18 months	None	97	39	32 GM 4 PM 0 NR	9 cc.	31.2	+ 2	Moderate early improvement.  Maintains definite improvement; recovery is partial.
15.	L.L.	M.	20	Schiz. Hebephrenic	2 years	7 days	None	67*	23	18 GM 1 PM 4 NR	7 cc.	11.4	+ 7	No marked change is noted.  Definite gradual and slight improvement.
16.	D.L.	M.	22	Schiz. Paranoid	3 years	1½ years	Paroled for 11 mos., then returned.	67*	27	19 GM 3 PM 5 NR	11 cc.	18.6	+ 2	No improvement.  No definite improvement.

17.	A.G.	M.	24	Schiz. Catatonic	17 months	9 months	Slight improvement after Insulin, then relapse.	67*	29	21 GM 4 PM 4 NR	13 cc.	25.2	+ 6	Gradual episodic improvement with occasional relapse.	Definite moderate improvement.
E. NO 1.	IMPROV B.B.	EM M.	EN 28	T WHATEVER: Schiz. Paranoid	8 years	4 years	None; previously received Insulin.	29	38	27 GM 6 PM 5 NR	12 cc.	36.2	+ 2	No change noted.	Unimproved and unchanged.
11.	M.B.	F.	23	Schiz. Catatonic	4 years and 6 months	4 years and 2 months	None	93*	35	31 GM 1 PM 3 NR	10 cc.	29.4	- 1	No change.	No change.
13.	M.A.	F.	37	Schiz. Paranoid	15 months	3 months	None	67*	30	24 GM 5 PM 1 NR	7 cc.	16.9	- 2	No change.	No change.
F. PAT 8.	IENTS W M.G.	HO F.	HA 33	VE DIED: Schiz. Catatonic	"Several yrs."	3 years	Occasional transient improvement.	28	12	9 GM 2* PM 1 NR	5 cc.	5.0	- 2	Moderate initial improvement.	Lethal Exodous.

GM—Grand mal

PM—Petit mal

NR—No Reaction

\* Still on treatment.

spasms. The seizure lasts approximately sixty seconds and stops very abruptly. During the seizure there will often occur extreme early flushing that is followed by marked pallor and sometimes by cyanosis. It is not unusual for the lips and finger nails to be cyanotic at the end of a seizure. Very severe reactions have produced generalized and, on a few occasions, extreme cyanosis. Ordinarily, there is prompt onset of respiration following the termination of the clonic spasm. Occasionally, there is a moderate delay in the onset of respiration or a period of apnea of ten to thirty seconds. On one occasion following a longer period of apnea artificial respiration was employed with definite benefit to the patient. During the seizure a mouth gag is employed to prevent biting the tongue. Involuntary urination is not infrequent. Seminal emission occurs frequently during the seizure.

The period of mental confusion that is regularly described as occurring following the seizure has been observed in this group of patients. The patients will ordinarily be able to get up and dress themselves at the end of one-half hour to one hour following a treatment, and almost always feel capable of eating a meal two or three hours after a treatment. There are numerous additional details that have been observed regarding the response or reaction of the patients, but these would seem to be too lengthy to record here at this time. We plan to include these in later reports.

Metrazol treatment has been supplemented by other forms of treatment whenever it seemed that benefit might be obtained from the employment of other forms of treatment. We have seldom used sedatives or other drugs during metrazol treatment but have regularly resorted to occupational and recreational therapy in an effort to do all that can be done for the patients under treatment.

We have observed in this group of patients an almost universal overwhelming fear of the treatment. We know of nothing that they dread quite as much as they do an injection of metrazol. Early in the course of the treatment it is not unusual for a patient to express the belief that he dies each time he receives an injection of metrazol. From the small group of patients observed, it appears that improvement in a patient is often preceded or accompanied by:

- (1) Development of definite resistance to treatment.
- (2) Progressive increase in weight.
- (3) A satisfactory convulsive seizure on relatively small doses of metrazol.

One observation that is puzzling at the present



time is the very excessive daily output of urine that has been observed in a number of patients who have been on treatment for a longer period of time and suggests the polyuria seen in diabetes insipidus. Mention of this in other reports has not been noticed. One patient excreted as much as 10,000 cc. of urine in successive twenty-four hour periods during the course of metrazol therapy and it has been observed also that a few patients have suffered some impairment of bladder control while on metrazol treatment. Daily output of four patients is submitted in Table II.

Each patient showed marked improvement in each phase of the recovery period.

Data pertaining to the type of patients treated, their age, duration of symptoms, drug administration and results obtained are submitted in Table I.

### COMMENTS ON RESULTS

Of the two patients who are out of the hospital on parole, one has been out since November 24, 1937. Early correspondence indicated that he has shown some tendency to relapse at home, but it has not been necessary for him to return to the hospital.

TABLE II  
Polyuria Occurring During Metrazol Therapy

	J. G.		B. B.		O. D.		P. M.	
	Sp. Gr.	Vol. cc	Sp. Gr.	Vol. cc	Sp. Gr.	Vol. cc	Sp. Gr.	Vol. cc
1st day	1.015	1185	1.010	2460	1.008	7420	1.005	4500
2nd day	1.010	2565	1.006	4620	1.004	10410	1.009	2845
3rd day	1.018	1395	1.008	2820	1.004	10440	1.010	2750
4th day	1.015	1650	1.005	3950	1.004	11010	1.008	3713
5th day	1.015	1500	1.005	3550	1.006	4012	1.005	4343
6th day	1.016	1725	1.008	2250	1.004	9075	1.005	4962
7th day	1.015	1300	1.005	3700	1.004	5849	1.004	5190
8th day	1.015	1500	1.006	2800	1.006	3990	1.005	4850

Another interesting point and at the present time puzzling, is that of relapse while on or immediately following metrazol treatment. It is believed from present observations that there is considerable danger of relapse if the treatment is of too short duration. It is further believed that if a patient does relapse that his chance for recovery is greatly reduced and the response to metrazol treatment on a second course will not be nearly so good as the response that may follow an initial course of metrazol treatment. In a few patients who made some improvement on metrazol treatment and then apparently remained stationary, there has been observed additional improvement following the discontinuance of the drug. This improvement has been very considerable in a few cases. There are two patients who have improved about as much after the treatment was stopped as they did while treatment was going on.

We accordingly believe that his present condition is at least better than it was before metrazol treatment. The second patient has been away from the hospital since January 9, 1938, and has made an exceptionally good adjustment according to information received. She has returned to her former station in life and has resumed her usual activities, which include positions of responsibility in a progressive city in a neighboring state. Since leaving the hospital, she has acted as a judge of high school debating and has been very active in parent-teacher and other civic organizations. This patient appears to have made a very satisfactory adjustment in every way.

Of the four patients whose improvement is thought to justify parole, one patient has been in excellent condition for more than two months and is being held at the hospital solely for the purpose

of sterilization prior to release from the hospital. Another patient shows marked improvement and for the past three weeks has rendered creditable service as a stenographer in the hospital. This patient is possibly slightly unstable even yet. She exhibits some mental tension in the presence of physicians, but this is not noticeable when she is with other people. A third patient is a dependable worker at the dairy barn. The fourth patient made a most spectacular improvement following his third injection of metrazol which produced the third good epileptiform seizure for him. He had a total of nine treatments with nine good epileptiform seizures and appears to have made a complete recovery. He has been approved for parole and will leave the hospital in the very near future. Two other patients showed marked early improvement but have relapsed and both are as bad or worse now than before metrazol treatment was started. In both of these patients the factor of irregularly induced seizures is present. In one of these patients the treatment was undoubtedly inadequate from the point of view of the number of treatments given, and the number of epileptiform seizures produced. This was one of the very first cases and while we complied with the recommendation that a patient receive at least three good seizures after he has shown marked improvements, we feel that additional treatment might have prevented a relapse. The second of these patients was quite resistive to treatment and her reaction to metrazol injection was relatively unpredictable. Metrazol treatment is discontinued at least temporarily for this patient and she is, at the present time, being kept under observation.

Seven other patients are considered to have shown definite improvement of at least moderate degree. Some of these patients have a very good chance of making further improvement and being granted trial parole, but this is entirely unpredictable at the present time. We can simply point out that in this group of patients, they are now uniformly cooperative, sociable, friendly, well adjusted to hospital life and most of them willing workers. This is in marked contrast to their former condition which was in general one of relative or complete inaccessibility, marked maladjustment to their environment, and a complete or relatively complete inability to pursue any purposeful activity. These patients formerly required constant observation. Some of them required restraint at times, and exhibited the usual picture of schizophrenic negativism, resistiveness and at times impulsiveness. All members of this group are in good enough condition now to

work outside on detail and require a minimum of supervision.

Three patients have shown no improvement whatever during the course of the treatment. Two of these are paranoids and one is a hebephrenic. One of the paranoids had previously received insulin shock therapy without benefit. He likewise received no benefit from metrazol. The other paranoid is in very poor physical condition and is for this reason hardly fit to receive metrazol. She has recently shown a very slight gain in weight and the treatment is being continued. The third patient has been in the hospital a little over four years and is still receiving treatment but shows no improvement.

One patient is dead. She died one evening, very suddenly, after having had an injection of metrazol but without having an accompanying epileptiform seizure on the morning of the day she died. Her last epileptiform seizure occurred two days previously and actually about sixty hours before she died. The details and circumstances of this patient's death will be submitted in a separate communication with a complete pathological report.

As stated above, this group of eighteen patients includes four patients who received insulin shock therapy prior to metrazol. Three of the four patients made definite, moderate improvement immediately following insulin, but relapsed rather soon. One of the patients is out of the hospital on parole at the present time. One is well enough that she could leave the hospital; one has failed to respond or show any improvement to a long course of metrazol and the fourth patient is still receiving treatment. He is showing some improvement being able to work out of doors on detail at the present time but there is still a very good chance that he will relapse and it is impossible to tell what the final outcome will be for him.

#### SUMMARY AND CONCLUSIONS

In this study metrazol treatment has not been used long enough, nor on a large enough group of patients to show definitely what the final results of this plan of treatment will be. At the present time there has occurred improvement sufficient to justify parole in thirty-three per cent of the cases treated; definite improvement in an additional thirty-three per cent of the patients treated and definite improvement followed by apparently complete relapse in another twelve per cent of the patients. One patient died during the course of metrazol treatment.

Three patients out of eighteen have shown no improvement on this plan of treatment. It is



recognized that the results obtained are in no sense conclusive, but it is believed that metrazol treatment is effective in certain cases of schizophrenia, and that this plan of treatment merits careful clinical and experimental study.

Although the results reported here are less favorable than reports made by other workers, due consideration must be given to the fact that in this study the patients treated were selected from regular chronic "run-of-the-mill" state hospital patients, being representative of that enormous group of custodial patients who in the end present so stupendous a problem in both administration and treatment within the state hospital. Full recognition, and a considerable measure of agreement, is given to the proposal that early cases are more responsive to metrazol than chronic cases but it is deemed worthwhile and an attempt has been made to determine what part metrazol will play in solving the problem presented by the enormous number of mental patients who from month to month constantly swell the total number of custodial cases in state institutions.

Further and more detailed study of metrazol treatment of mental patients is planned.

### BIBLIOGRAPHY

1. Von Meduna, L.: The Significance of the Convulsive Reaction During the Insulin and Cardiazol Therapy of Schizophrenia, *The Journal of Nervous and Mental Diseases* 87:2:133-139.
2. Sakel, Manfred: On The Significance of the Epileptic Convulsion As A Therapeutic Factor in the Pharmacological Shock Therapy of Schizophrenia, *The Journal of Nervous and Mental Diseases* 87:2:140-155.
3. Russell, John, and Fellows, Ralph M: Insulin Shock Therapy: Observation on Six Cases, *The Journal of the Kansas Medical Society*, 38:10. Oct. 1937.
4. Sorger, E., and Hofmann, E.: The Convulsant Treatment of Schizophrenia. *Psycho-neurolog. Wschr.*, 39:462-465, 473-478, 1937\*.
5. Scheuhammer, P. and Wiszgotz, L.: Experiences with the Metrazol Treatment of Schizophrenia. *Psycho. Neurolog. Wochenschr.* 39:286-288, 1937\*.
6. Wahlmann - Sanitarium Hadamar, Germany: The Treatment of Psychoses With Metrazol. *Psych. Neurol. Wochenschr.*, 38:78 (Feb. 15) 1936\*.
7. Von Meduna, L.: The Convulsive Therapy of Schizophrenia. *Psycho.-Neurol. Wchenschr.*, 37:317 (July) 1935\*.
8. Esser, A., and Kuehn, A.: The Fate Of Metrazol In The Human Body. *Arch.f.Exper.Path.u.Pharm.*, 171:284, 1933\*.
9. Strasser, E. M.: Metrazol As A Stimulant During Surgical Anesthesia. *The Ohio State Medical Journal*, 28:2:123. (Feb.) 1932, Cincinnati, Ohio.
10. Schlaepfer, K: The Antagonistic Effect of Metrazol to Shock and Anesthetic Depression. *Anesthesia and Analgesia*, July-August, 1936.
11. Stoland, O.O., and Ginsberg, A.M.: Studies On Coronary Circulation. *The Journal of Pharmacology and Experimental Therapeutics*. 60:4:396, August, 1937.
12. Friedman, E.: The Irritative Treatment of Schizophrenia, *The American Journal of Psychiatry* 94:2:355-372, Sept. 1937.
13. Friedman, E.: Irritative Therapy of Schizophrenia. *New York State Journal of Medicine*. 37:21:1-9, Nov. 1, 1937.

\* Abstract furnished by Bilhuber-Knoll Corporation.

## CASE OF VON RECKLINGHAUSEN'S DISEASE OR NEUROFIBROMATOSIS, INVOLVING CRANIAL AND PERIPHERAL NERVES

M. Gerundo, M.D.\* and

W. W. Corwin, M.D.†

Topeka, Kansas

Neurofibromatosis in its complete development has been considered a rare disease. Discovered by Recklinghausen, he considered the tumors of nerves as originating from the perineurial fibrous tissue and gave the disease the name of neurofibromatosis.

The histologic and etiopathogenetic problems raised by this uncommon disease, have been the subject of numerous contributions and studies intermingled with controversies, which have not as yet ended.

The very rare association of peripheral tumors with bilateral acoustic nerve tumors has been reported only in forty cases. The generalization of the tumors to the peripheral and cranial nerves raises some questions of histogenesis and also reveals the character of the systematic disease.

We had the opportunity recently to study a case of generalized neurofibromatosis, which we are going to report first, leaving the discussion of the histogenesis to the comment:

This patient, R. E., was a white male, twenty-six years of age and single. The first symptoms occurred three years ago, at which time the patient fainted and was unconscious. Several hours following this he apparently recovered. Prior to this time numerous subcutaneous nodules had been observed. A biopsy was done at that time and a diagnosis of Von Recklinghausen's disease was made.

The patient was admitted to the Topeka State Hospital April 15, 1937 because of mental symptoms. These symptoms had developed slowly over a period of several months. He had numerous delusions of a paranoid nature and it became impossible for him to be cared for at home. At the time of admission he was blind, deaf and was unable to carry on a conversation. The family history is negative.

The physical examination at that time revealed a white male, unable to walk without assistance, with moderate exophthalmus, marked papilloedema and numerous nodules scattered over the body. These nodules ranged in size from one or two c.m. to seven or eight c.m. in diameter. Some of the nodules were attached to the skin, while others were subcutaneous and freely movable. Some pigmentation was observed in the superficial nodules. There were two quite large subcutaneous nodules on either side of the neck, located directly above the thyroid gland. Towards the end of his illness these nodules interfered with swallowing.

\*Pathologist at the Topeka State Hospital, Topeka, Kansas.

†Resident Surgeon at the Topeka State Hospital, Topeka, Kansas.

There was a bilateral Babinski and considerable atrophy of the lower extremities. The blood Wassermann and urinalysis were negative. The patient ran a progressive downhill course and expired December 27, 1937. (1)

Post mortem findings: Numerous small nodules scattered on the trunk and extremities, and apparently located in the derma. The skin overlying them shows sometimes a brown pigmentation. Numerous nodules are also present in the subcutaneous tissue and deeper structures, apparently scattered along the course of the nerves. Along the course of the ischiaticus peroneus nerves are found symmetrical tumors. Visceral nerves appear thickened.

On removal of the brain the dura shows numerous small tumors of the same consistency and appearance of the peripheral tumors. The surface of the brain is slightly edematous, but normal. At the base of the brain on both sides of the medulla, located in the cerebello-pontine angles, are two tumors, hard, of uneven surface, the one on the left side being the size of a small apricot, the other on the right being twice as large. The tumors may be shelled out easily from their niches, formed by compressing the brain matter. On section, they are whitish, dense and of a fibrillar structure. The right tumor is still attached to the acoustic nerve, which appears greatly thickened at its origin from the pons. A thick vascular pedicle enters the tumor at its point of attachment to the acoustic nerve. On the left side a small tumor, the size of a bean, is attached to the trigeminus, soon after its origin from the middle of the pons. As the large tumor of the acoustic is right above it, the trigeminal tumor appears compressed and flat. The right fourth nerve shows on its course at the base of the brain two small fusiform enlargements, the size of a millet grain. The two small tumors are very near each other. The third nerve, at the right, shows also an enlargement, somewhat larger than a millet grain. Following the course of the other cranial nerves, many of these appear thickened and hypertrophied.

The tumors found along the course of the peripheral nerves show a whitish color, and a fibrillar structure. They show a central area of necrosis of a yellow sulphur color, surrounded by a thick fibrous band, separating it from the peripheral proliferating area, where the fibrillar structure is evident. All the tumors are displaceable, not adherent to the surrounding tissues, and apparently well limited and encapsulated.

Microscopic examination: The tumors are formed by elongated cells with wavy cytoplasm and a fibrillar structure, arranged to form whorls. The whorls are sometimes small, at other times rather large, so as to occupy all the microscopic field. In the smaller tumors, which are also the younger, such a structure is very evident. In the larger tumors, in which necrosis and fibrosis are prevailing, such a typical arrangement is more difficult to make out. Numerous bundles of fibrous tissue are already intersecting and separating the tumor tissue proper. Collagen fibers are invading the whorls, and the tumor cells are arranged in palisading formation. In the areas of necrosis numerous foamy cells or pseudo-xanthomatous cells are present. It is important to note that many melanin bearing cells are found scattered between the fibers.

The two large brain tumors show the same structure described above, with the difference that the collagen tissue is increased and infiltrated between the tumor

whorls or penetrates inside the whorls, dissociating the tumor cells. With Masson's Trichrome and Heidenhain's stain, the tumor cells and fibers can very easily be differentiated from the collagen fibers, showing that the tumor growth is due to proliferation of the tumor cells and the increase in collagen tissue. In the small tumors of the derma, where the fibrous tissue had no opportunity to proliferate, the tissue is more characteristically neurinomatous. It is here that the Bielschowski stain shows numerous nerve fibers, entering the whorls of cells, or broken in blocks at the periphery of it. With the differential stain numerous fibers inside the whorls take the myelin stain.

The tumor cells show some fine fibrils, which by interlacing with each other, form a rather intricate network. With reticulin stain, it is evident that the tumor cells do not form reticulin as the only precolangeous fibers shown in the older tumors are derived from the large collagenous bundles situated at the periphery of the whorls or at random between the tumor fibers.

Although, as we have already mentioned at the beginning, such a central and peripheral neurofibromatosis is very rare, limited forms or larvated forms of the disease are more common. Between forms generalized to all the nerves, including the sympathetic, and the solitary forms of neurinomas, there are many transitional cases, which deserve the attention of the clinician. These forms of the disease, appear sometimes rather proteiform.

When the tumors, particularly those of the skin, are well developed and noticeable the diagnosis is less difficult. The difficulty arises when the tumors are in a deeper location or the nerves are uniformly hypertrophied and the cases present only an elephantiasis of the nerves or marked pigmentations, without palpable tumors.

The hereditary character of the disease is not always evident, as often is mentioned. It is true there are now many reports of neurofibromatosis, followed up in the same family and more evidence is accumulating that the origin of the tumor is possibly due to defects of the neural anlage.

The capital symptoms of the disease are:

1. Tumors along the course of the nerves, cranial, spinal or sympathetic, from their origin to their termination.
2. Tumors of the derma or subcutaneous tissue, which may be pedunculated or sessile.
3. Pigmented spots or blotches, of a grayish or "café-au-lait" color.
4. Elephantiasis or bony changes, simulating a cystic or pagetic changes.

If the syndrome is not fully developed, one or more of these signs only may be present. The location of the tumor may give rise to a varied symptomatology, from that of brain tumor to spinal symptomatology if the tumor develops inside the

(1) Dr. Corwin contributed the clinical history.



vertebral foramina, or visceral symptoms if the tumor occurs along the sympathetic branches. Pain or anesthesia may sometimes be present, if the tumor develops along sensory nerves.

A rather interesting association or relation exists between neurofibromatosis of the cranial nerves and tuberous sclerosis, and very often in the cases reported of involvement of the cranial nerves, the intelligence of the subject has been rather mediocre.

The presence of so many tumors, which sometimes may surpass the hundreds and give to the pa-

tient a loathsome appearance, with a brown pigmentation of the skin and numerous pendulous tumors, involves some conception of etiopathogenesis, that is, a congenital defect of formation of the ectoderm, to which both the nervous tissue and the skin belong. Such a defect has been called dysembryoplasia, because of the connection with the formative embryonal period.

Another question involves the possible malignancy of these tumors. They are usually of the adult type and benign. The multiplicity of tumors

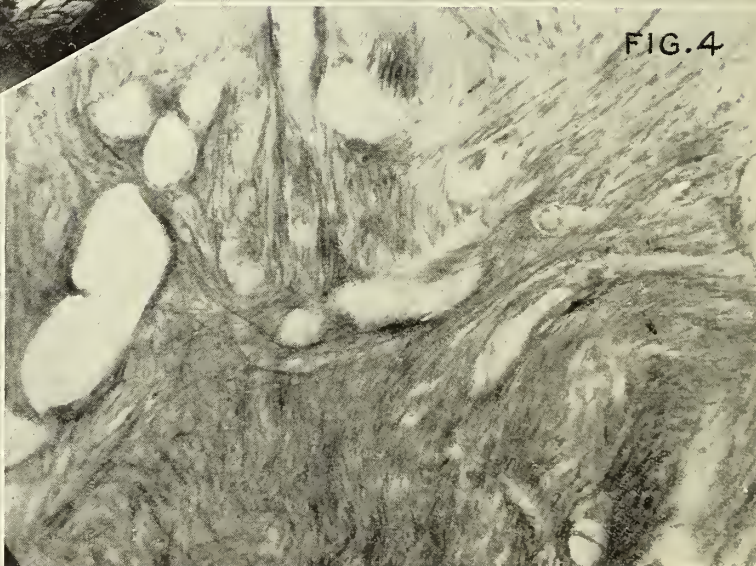
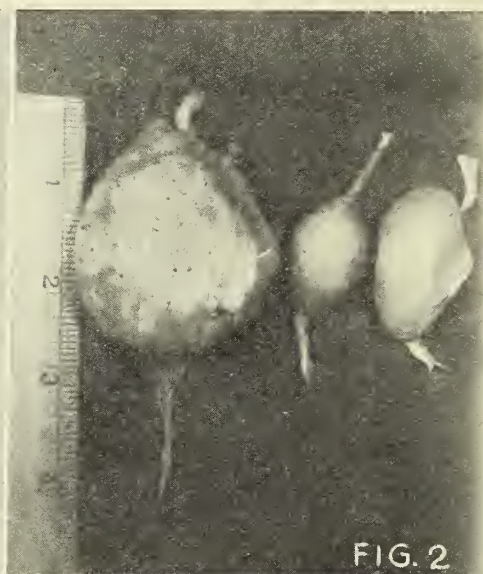


Fig. 1—Bilateral acoustic nerve tumors.

Fig. 2—Peripheral nerve tumors.

Fig. 3—Microscopic aspect of the tumors Hem-Eos. Stain, x60.

Fig. 4—Microscopic aspect of the acoustic nerve tumors. Note the evident fibrillar structure of the tumors. Gold Chloride Stain, x100.



has to be explained as a dysembryoplasia of all the ectoderm and not as metastatic growth of an original tumor.

Although their systemic character is essentially benign, however, a few reports have been published in which one or more of the tumors have shown malignant signs. Miller, Fittipaldi and Pazzagli have described interesting cases of malignant neurofibromatosis.

It should be mentioned also at this time the association of Von Recklinghausen disease with other malformations or tumors. Willis has reported the association of neurofibromatosis with cromaffin tumors of the adrenal, Aegerter the association of a diffuse neurofibromatosis with spongioblastoma of the hypothalamus. Other authors have noted the frequent association with naevus and naevo-angiommas or other melanomas. In all these cases, it must be noted that all these tumors lie in the ectoderm and are dependent upon a congenital malformation. Aegerter and Smith, in the brilliant discussion of their case, suggest a "specific neuropathic growth-stimulating factor, acting on the various component of the nervous system, but especially the supporting cells, as the glia, the endoneurium, perineurium and epineurium. They suggest the probable nature of such an activator, to be that of some endogenous enzyme."

Von Recklinghausen's original conception was that the skin and nerve tumors originated from the endo- and perineurial connective and so called them neurofibromas. To this connectival theory of Von Recklinghausen, Mallory, Cushing and Penfield in this country became strenuous supporters.

Verocay in one of the most important studies on the tumors of nerves, determined and supported the conception that the tumors are derived from the cells of Schwann and proposed for such tumors the name of neurinomas. Nageotte, Lhermitte, and Roussy supported such a conception and considered the cells of Schwann as peripheral neuroglia, giving the tumors the name of peripheral glioma. Masson, who recently has been the one to give some experimental proofs of the origin of the tumors, proposed the name of Schwannoma, which is often used to designate the solitary tumors of the nerves.

On experimental ground, Masson was able to differentiate the tumors arising from sensory nerves and those arising from motor nerves, according to the presence or absence of palisading of the cells. He connected the tumors showing palisading with the tactile corpuscles of Wagner-Meisner.

However, it must not be forgotten that the leiomyomatous tissue offers many times as aspects

of palisading, which closely simulate the palisading aspect of the neurinomas. Cerulli, however, has dedicated a very important study to the histological differential diagnosis between myoma and neurinoma by means of the Ieddeloh stain.

Between the connective and nervous theories, which both try to explain the origin of these tumors, at the present time the trend and the opinion of the majority of the authors rally to the neurogenic theory. It is true that one of the serious objections is that in the formation of these tumors a large amount of fibrous tissue is present and that sometimes the nervous elements are completely absent. Naegotte, on experimental ground, tried to explain that the formation of collagen is not inherent character of the fibrous tissue only, but also epithelial cells or other ectodermal derivative may give origin to collagen. Although the theory is rather seductive and the collagen formation of these tumors could easily be explained on such a basis, it has not been accepted by the majority of the authors.

From a histological study of these tumors, we have gained a completely different opinion and it seems probable that both conceptions may be reconciled with each other. The connectival theory has been gained certainly through the study of the larger tumors, that is, tumors which have already undergone important changes. In the advanced stages when a proliferation of the fibrous tissue and a degeneration or breaking down of the cylindraxes has taken place, the establishment of the origin is rather aleatory and the tumor has lost many of its peculiar characteristics.

The very early cases, when only a swelling of the nerve is present or the tumor is very small, are more suitable to establish the origin. In the histological description already given of our case, we have seen how in the small tumors, which are the more recent, evidently the proliferation is due only to neurogenic elements and the fibrous tissue very scanty, with no tendency to proliferate. As the tumor-growth progresses, the fibrous tissue in contact with neurinomatous tissue, starts to proliferate, as we occasionally also observe in epithelial growth, and finally make up a large part of the tumor. The nervous tissue is suffocated by this overgrowth of collagen fibers, penetrating inside the pseudo-lobuli, breaking up the nervous elements, which appear discontinued or reduced in irregular blocks, and finally the tumor assumes partly the aspect of a fibroma. It must be taken into consideration that even in this advanced state, the aspect of the tumor is different from a common fibroma and that selective stain will differentiate fibers of collagen tissue and nervous



fibers, although in common stains all appear homogeneous and fibrous.

By following up the various stages of growth of these tumors, it is evident that they originate from neurogenic elements, particularly the cells of Schwann, according to the original conception of Verocay and contain a large number of myelinated and unmyelinated fibers, continuous or interrupted, and that the proliferation of the connective tissue belongs only to a later stage and is only a superimposition on the nervous tissue growth.

It is possible, according to the opinion of Herzheimer, Coenen and Tramontano, that the tumors originate from specific elements of the nervous system, with participation of the connective tissue, inasmuch as a reaction of the mesodermal portion follows the proliferation of Schwann cells. They think that the same tumor-stimulating agent acts upon both mesodermal and ectodermal elements. Of course, Verocay also admitted the existence of some neurino-fibromas in those cases, in which there was a prevailing proliferation of connective tissue.

The existence of tumors, with participation of two different kinds of tissue, as carcino-sarcoma, or adeno-fibroma, etc., is not disputed and such a possibility cannot be denied also for the tumors in question. But the study of the younger tumors indicates without doubt that the proliferation is from specific neurogenic elements first, and that in the majority of the tumors, the connective proliferation is present only in the more advanced stage and that even in such an instance, it is difficult to state whether the connective tissue is undergoing tumoral proliferation or is an incidental consequence of the nervous fibers or splitting up of the structures. In the more advanced stages, we see the loss of typical palisading, a more reticular aspect of the tumor, and very often, the presence of pseudo-xanthomatous cells. Such cells are never present in true fibroma and leiomyoma and in our opinion, they indicate some lipopessic activity, possibly they are macrophages engulfing the myelins or the lipoids, derived from the splitting up of the nerve fibers.

So, while we are closely approaching the conception of Herzheimer, Coenen and Tramontano, that possibly the same tumor-stimulating agent may lead to proliferation of both mesodermal and ectodermal tissues in some combined form of neurino-fibroma, we are not considering that the same is true for all the tumors of this type.

In the great majority of cases, we admit that the proliferation of xanthomatous, as well as fibrous elements, is present only in late cases and they are

only incidental to the splitting up of the tumor tissue and the necrotic matter included in the tumor.

### Summary

A rare case of diffuse neurofibromatosis, with bilateral acoustic nerve tumors, has been reported. The histogenesis of these tumors has been discussed and the neurogenic origin admitted.

### BIBLIOGRAPHY

1. Aegerter: Case of diffuse neurofibromatosis involving cranial, peripheral and sympathetic nerves, accompanied by a tumor of the hypothalamus, *American Journal Cancer*, 31, 212, 1937.
2. Bargaglia: Syndrome ischialgica in m. di R. Atti. S.L. Medic. 5, 297, 1937.
3. Bogaert: Tumeurs bilaterales de L'acoustique et neuro-fibromatose, *Annals d'An. Pathologique* 11, 350, 1934.
4. Cattabeni: Tumori bilaterali dell'angolo ponto-cerebellare e neurofibromatosi, *Atti Soc. Lomb. di Med.* 5, 265, 1937.
5. Cerulli: I neurinomi periferici e la loro diagnosi differenziale istologica, *Pathologica* 27, 19, 1935.
6. Cushing: Tumors of the nervus acusticus and the syndrome of the cerebello-pontile angle, W. B. Saunders, Phila, 1917.
7. Cushing: Intracranial tumors, p. 85, Ch. Thomas, Baltimore, 1932.
8. Del Rosso: Contributo allo studio delle forme rare della malattia di Recklinghausen, *Ann. Ist. Maragliano*, 6, 195, 1936.
9. Grenet, Ducroquet, I-Georges and Mace: Forme frustes pigmentaire et osseuse de la neurofibromatose, *Pr. Med.* 42, 2060, 1934.
10. Israel and Leibbrandt: Lesions osseuses au cours d'une maladie Recklinghausen, *Strasbourg Med.* 95, 289, 1935.
11. D. Lewis: Elephantiasis Nervorum, *Annals of Surgery* 92, 209, 1931.
12. Lionette: La Malattia di Recklinghausen, Ed. Pozzi, Roma, 1935.
13. Masson: Experimental and spontaneous Schwannomas (peripheral gliomas), *American Journal Pathology* 8, 367, 1932.
14. Masson: Histogenèse des neurofibromes cutanés diffus, *Bull. Soc. franc. de dermat. et syph.* 42, 1278, 1935.
15. Menetrier: Le Cancer, p. 886, Bailliere et fils, Paris, 1927.
16. Miller: Neurofibromatosis with reference to skeletal changes, compression myelitis and malignant degeneration, *Archives of Surgery* 2, 109, 1936.
17. Penfield: Cellular Pathology of the C.N.S. Vol. III, 955, P. Hoeber, New York, 1932.
18. Rille: Der Gesichtsausdruck, ein neues Kennzeichender Fibroma molluscum (Morbus Recklinghausen), *Derm. Wchschr.* 101, 1432, 1935.
19. Segre: A proposito di tumori dell'angolo ponto-cerebellare e neurofibromatosi, *Atti Soc. Lomb di Med.* 5, 279, 1937.
20. Stout: Human Cancer, p. 600, Lea and Fibiger, Philadelphia, 1932.
21. Willis and Rosenthal: The association of chromaffin tumors with neurofibromatosis, *Journal Pathology & Bacteriology* 42, 599, 1936.

## SYPHILIS CONTROL IN SEDGWICK COUNTY

J. V. Van Cleve, M.D. and

Clyde Miller, M. D.

Wichita, Kansas

Each county medical society and its public health service must work out its own syphilis control program before any perceptible decrease in the incidence of syphilis will be noted. It is in these small, well-organized units, which are dealing directly with the disease, that the responsibility lies in this nationwide program to make syphilis a rare disease. We will explain the plan operating in Sedgwick County, which is controlled and operated by members of

the Sedgwick County Medical Society and our local public health officials.

The Sedgwick County Medical Society organized its county clinic and hospital in November, 1933, setting up a special clinic for the treatment and control of syphilis. The staff is selected from members of the county society who work with the active staff of the hospital and clinic. Since the clinic was organized, some eight hundred patients with syphilis have been treated, six hundred spinal fluid examinations have been done, and the Wassermann test has become routine at the county's hospital, clinic and jail.

The cardinal principle of syphilis control is "adequate treatment for all cases of active syphilis". This treatment is and should be controlled by the private physician in all who are able to pay. The indigent and semi-indigent receive treatment at a centralized clinic, controlled and operated by the members of the Sedgwick County Medical Society. The type of treatment is continuous (each week) until they have had a negative blood Wassermann for at least a year. They are then discharged for observation and told to return at frequent intervals for a Wassermann test. The treatment is compulsory in all active cases. By compulsory we mean that if they miss two consecutive treatments, a social service worker wearing a police badge soon pays them a visit. This usually brings about the desired result, and the patients become more faithful to their treatments.

Of next importance is "isolation of all cases which might transmit the disease". With the private physician this cannot be or is not easily accomplished. In the clinic, all patients who have active lesions are hospitalized in the county hospital, where they are isolated. They receive three intravenous injections of mapharsen a week until their active lesions are completely healed. They are then discharged and told to report to the county clinic for regular treatment.

The next step, and one of the most difficult, is to "find all cases of syphilis and bring them in for treatment". Many cases which are unable to pay are referred to the clinic by the private physician. An active social service department headed by a competent nurse is indispensable in such a set-up. Each active case of syphilis that comes to the clinic is thoroughly questioned as to the source of his infection and to any possible contacts. These are recorded and turned over to the nurse in charge who finds them and brings them to the clinic for examination and blood Wassermann test. If the patient is able to pay, he or she is requested to pre-

sent a recent blood test from a private physician or laboratory. Routine Wassermanns on county hospital and clinic admissions account for many of our patients. As syphilis is prevalent among the law-breakers, routine Wassermanns are taken on all cases admitted to the county jail, as well as all pick-ups for immoral charges. By these methods, we bring in for treatment many cases which would otherwise still be syphilizing the community.

Of great importance, and a thing that can be done completely, is "to wipe out congenital syphilis". We know absolutely that with thorough treatment started before the fifth month of pregnancy, there is only one chance in eleven that the syphilitic mother will not bear a healthy child. We know that five times out of six, the untreated mother will bear a dead or a diseased child. We know that a month of treatment before birth is more effective than a year of treatment after the diseased child is born. All pregnant women at the clinic have a blood Wassermann as soon as the pregnancy is established, and all who are syphilitic have intensive active treatment until delivered. Treatment is compulsory and a careful follow-up of each case is done. Although these measures have only been carried out for four years, we have noticed a marked reduction in our early cases of congenital syphilis.

All legal questions, police pick-ups, and unco-operative patients are handled by the city physician. The city laboratory does Wassermann tests on all cases handled by the city physician, the Salvation Army Hospital, the Christian Service League, and all cases, referred by a private physician, who are unable to pay. Patients unable to pay for treatment are referred to the county clinic where they are closely followed. Women arrested on charges of immoral conduct and who are not cooperative are sent to Lansing, and the men sent to the State Farm where they are put on active compulsory treatment.

Because each case of early syphilis must be looked upon not simply as a patient, but as a starting point in finding other infectious individuals, a social service department of the special clinic has been organized whose duties are as follows:

1. To bring into the clinic for examination all persons exposed to an active syphilitic patient.
2. To trace all sources of his infection.
3. To force, by legal measures, treatment of all active cases.
4. To bring into the clinic for Wassermann examination all children of syphilitic parents.

(Continued on Page 270)



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

The committees for 1938-1939 have been completed and will be published in this issue.

Not many changes have been made in the personnel, believing it is poor policy to disrupt a work well begun and start anew.

The committees on Medical Economics, and Control of Tuberculosis particularly have done a great amount of valuable work, that would be difficult for a new committee to assimilate quickly and carry on effectively.

The strength of the State Society is directly dependent on the component county societies, but real progress is greatly enhanced by committees that function.

In the report filed by the Editorial Board, Dr. Mills called your attention to the need of more scientific material for publication in the Journal.

Our Editorial Board has been most faithful in trying to give us a good Journal. The articles presented because of their scientific nature cannot be turned over to laymen to read and approved for publication; so Dr. Mills and members of the board give many hours of their time reading all articles submitted.

The Society is deeply indebted to them for this great amount of work, and I would like to urge that any good material presented in the county medical society or hospital staff meetings, or any original article of any members of the Society, be submitted to the Editorial Board for their approval, and if acceptable, for publication. The Editorial Board needs the helps and we should assist them.

The A. M. A. Convention will be in full swing when this issue of the Journal goes to press. We hope many from our State will find it possible to attend.

We feel, however, that our Society will be well represented by our delegates, Dr. J. F. Hassig and Dr. H. L. Snyder, and that they will bring back something worth while.

N. E. Melencamp, M.D., President.

---



---

## EDITORIAL

---



---

### SUPREME COURT OPINION

The opinion of the Kansas Supreme Court in the case of *The State of Kansas vs. B. L. Gleason* is here published for the information of our readers.

Under the law the standard of educational requirements for the practice of medicine and surgery and that for the practice of osteopathy is different. The fact brought out by the court, that osteopaths are not Doctors of Medicine according to the law, is gratifying to organized medicine. This fact should also be of interest to the general public. The indifference of a large body of the population to the qualifications and training of their medical attendant has led to the employment of osteopaths as physicians. It should be made clear to the public that there is a great difference between the educational requirements and training of osteopaths and that of Doctors of Medicine. From an enlightened public will come fewer young men seeking to enter the practice of medicine by the short-cut method of osteopathy.

Let us help to make this point clear by our individual efforts.

The opinion in its entirety is as follows:

No. 33,570

THE STATE OF KANSAS, ex rel. Clarence V. Beck, Attorney General, Plaintiff, v. B. L. GLEASON, Defendant.

#### SYLLABUS BY THE COURT.

1. In the exercise of its police power for the welfare and protection of its citizens the state may enact statutes fixing educational and other reasonable qualifications for those who, for compensation, engage in the healing of the sick, afflicted, or injured, and require them, before engaging in such practice, to procure a certificate evidencing the fact they have attained such qualifications and authorizing them to practice the art or profession of healing in harmony with the established standards of their respective qualifications as indicated by such certificate.

2. By the statutes noted in the opinion our Legislature has recognized a difference between the practice of medicine and surgery and the practice of osteopathy, and has provided for the issuance of different certificates to the different classes of practitioners by different state boards of examination and registration, using different standards of qualifications.

3. In an original proceeding in quo warranto to oust one from the unlawful practice of medicine and surgery, certain questions of law propounded have been considered and ruled upon in advance of a trial of the facts.

Original proceeding in quo warranto. Opinion filed June 11, 1938. Questions of law propounded are ruled upon in advance of a trial of the facts.

Clarence V. Beck, Attorney General, and Theo. F. Varner, Asst. Attorney General, for the plaintiff.

Hal E. Harlan, and A. M. Johnston, both of Manhattan; Harry W. Fisher, of Fort Scott; Albert Faulconer, Kirk W. Dale, C. L. Swarts, and Donald Hickman, all of Arkansas City, attorneys for The Kansas Medical Society, amici curiae.

William H. Vernon, and Vincent G. Fleming, both of Larned; James E. Smith, E. H. Hatcher, and Frank H. McFarland, all of Topeka, for the defendants.

The opinion of the court was delivered by

HARVEY, J.: This is an original proceeding in quo warranto, authorized by Chapter 270, Laws of 1937, to oust defendant from the unlawful practice of medicine and surgery. The case is now presented for the determination of certain questions of law which arise upon the pleadings in advance of the trial of the facts, authorized by G. S. 1935, 60-2704 and 60-2902. Therefore, it is deemed prudent to set out the pleadings.

The petition, omitting paragraph 1 and 2 and the prayer, reads:

"3. That the defendant, B. L. Gleason, is not now, nor was he at the times hereinafter mentioned, licensed by the Board of Medical Registration and Examination of the state of Kansas, and is not now, nor was he at the times hereinafter mentioned, authorized to practice medicine and surgery as defined by the laws of the state of Kansas; that the defendant, B. L. Gleason, is now, and has been, at all times mentioned herein, lacking in the educational and professional qualifications to enable him to practice medicine and surgery, as defined by the law of the state of Kansas.

"4. That the defendant, B. L. Gleason, claims to have the right and privilege of practicing medicine and surgery, and does in fact, and has for many years past, engaged in the profession of the practice of medicine and surgery; that in the course of the defendant's practice of medicine and surgery, he has, and is now treating numerous patients in a hospital owned and operated by this defendant, located in Larned, Kansas, which said patients are treated by this defendant by medical treatment and by surgical treatment; that this defendant is without lawful power or authority to engage in the profession of treating patients for hire, either by prescribing medicine or by performing surgery; that the defendant is now, and has been, since the year 1915, a licensed osteopath under and by virtue of and pursuant to the statutes of the state of Kansas, pertaining to osteopaths, and by reason of such license, is not empowered or privileged to engage in the practice of medicine and surgery, but is only authorized and empowered and privileged to engage in the practice of osteopathy, as the same was taught in legally incorporated colleges of osteopathy of good repute, in the year 1913, pursuant to G. S. 65-1201.

"5. That the defendant, B. L. Gleason, owns and operates within the city of Larned, Pawnee county, Kansas, a hospital, in which hospital



divers and numerous patients have been and are being received for the purpose of receiving both medical and surgical treatment for the ills of said patients; that the defendant, B. L. Gleason, does in said hospital prescribe medicine for a fee to said patients and does perform surgical operations thereon for a fee, and does permit and authorize other licensed osteopathic physicians to engage in the practice of medicine and surgery defined by the law of Kansas therein; that the operation of such hospital by this defendant is in violation of the laws of the state of Kansas, and is an unlawful usurpation of power and privilege by this defendant.

"6. That by reason of the allegations hereinbefore set forth, the said defendant has intruded into the practice of medicine and surgery in the state of Kansas, and is now, and has been usurping the right, authority and privilege of practicing medicine and surgery in the state of Kansas without any warrant or authority of law, and that said defendant will, unless ousted therefrom by this court, continue to practice medicine and surgery in the state of Kansas without lawful authority so to do, and in violation of and in disregard of the statutory requirements of the state of Kansas."

The answer contains a general denial, admits the allegations of paragraphs 1 and 2 of the petition, and omitting the prayer reads:

"Defendant admits that he is not now, nor was he ever, licensed by the Board of Medical Registration and Examination of the state of Kansas, as alleged in paragraph 3 of said petition.

"Defendant admits that he is a duly licensed osteopathic physician and surgeon as alleged in paragraph 4 of said petition and states that as such he has for many years treated patients both medically and surgically, as alleged in said paragraph 4, and is now so doing.

"Defendant for his further answer states that he is authorized, empowered and privileged to engage in the practice of medicine and surgery, including drug therapy, under his license as an osteopathic physician and surgeon as defined by section 65-1201, G. S. 1935, and states that at all times mentioned in said petition he has treated patients both medically and surgically as taught and practiced in legally incorporated colleges of osteopathy of good repute.

"Defendant states that he is a graduate of the American School of Osteopathy of Kirksville, Mo. (now known as the Kirksville College of Osteopathy and Surgery), of the year 1915 and that all the time he attended said college, which included the year 1913, the use of medicine and surgery, including drug therapy, for the treatment and alleviation of human ills were taught and practiced in said college; that the osteopathic school or system of medicine and healing contemplates, comprehends and includes the practice of medicine and surgery, including drug therapy, and that colleges of osteopathy use the same textbooks on the practice of medicine and surgery that are used in approved schools of medicine generally, such as allopathic and homeopathic schools of medicine, and devote sufficient time

to these subjects to thoroughly qualify their graduates in the use and practice of medicine and surgery; that the charter of said American School of Osteopathy (now known as the Kirksville College of Osteopathy and Surgery) specifically provided for the teaching of surgery, obstetrics, such sciences and arts as are usually taught in medical colleges, and the treatment of diseases generally, including the use of drugs.

"Defendant admits that he operates a hospital in the city of Larned, Pawnee county, Kansas, and that he permits and authorizes other licensed osteopathic physicians and surgeons to use said hospital, but states that divers and numerous patients which have received, and are now receiving, medical and surgical treatment for the ills of said patients for a fee have been and are now being treated, both medically and surgically, according to the latest and best-known methods and systems of medicine and surgery taught and practiced in legally incorporated colleges of osteopathy of good repute.

"Defendant specifically denies that by his license he is only authorized, empowered and privileged to engage in the practice of osteopathy as was taught in legally incorporated colleges of osteopathy of good repute in the year 1913, pursuant to section 65-1201 G. S. 1935, as alleged in said paragraph 4, and for further answer alleges that on the contrary section 65-1201 G. S. 1935, authorizes and empowers defendant to practice medicine and surgery, including drug therapy, according to the latest and best-known methods as now taught in legally incorporated colleges of osteopathy of good repute; that the system, method and science of osteopathy is progressive, and that defendant possesses the educational and professional qualifications, by study and by experience to exercise the requisite degree of care, skill and diligence in the treatment of his patients, as is required of practitioners of medical science; that by reason of his certificate to practice osteopathy, issued by the State Board of Osteopathic Examination and Registration, defendant is authorized, empowered and licensed to practice osteopathy and surgery as taught and practiced in legally incorporated colleges of osteopathy of good repute and that his certificate of authorization to so practice is conclusive evidence of his qualification and ability to practice and cannot be collaterally attacked in this proceeding, but can only be questioned and investigated in a proceeding to revoke said certificate and license."

The reply is a general denial.

The determination of the questions submitted, insofar as they are questions of law as distinct from questions of fact, and insofar as they are material to the issues formed by the pleadings, requires an examination of our statutes pertinent to the issue. It has been uniformly held in this state

(State v. Creditor, 44 Kan. 565, 24 Pac. 346;  
State v. Wilcox, 64 Kan. 789, 63 Pac. 634;  
Meffert v. Medical Board, 66 Kan. 710, 72  
Pac. 247;

State v. Johnson, 84 Kan. 411, 114 Pac. 390;

State ex rel., v. Cooper, 147 Kan. 710, 716, 78 P. 2d 884); and generally elsewhere (48 C. J. 1068; 21 R. C. L. 352, 353), that in the exercise of its police power, and for the welfare and protection of its citizens, a state may enact statutes fixing educational and other reasonable and proper qualifications for those who, for a compensation, engage in the healing of the sick, afflicted, or injured, and require such persons, before engaging in such practice, to procure a certificate evidencing the fact they have attained such qualifications, and authorizing them to practice the art or profession of healing in harmony with established standards of their respective qualifications, as indicated by such certificate. The authority of the state to enact such statutes is conceded in this action.

We need not review such statutes as we had on this subject prior to 1901, for they were repealed in that year, and a much more comprehensive statute pertaining to the subject was enacted. (Ch. 254, Laws 1901. This was an act "to create a state board of medical registration and examination, and to regulate the practice of medicine, surgery and osteopathy in the state. . . .")

Section 1 of the act provided for the creation and prescribed the general duties of a state board of medical registration and examination, composed of seven members, "who shall be physicians in good standing in their profession, and who shall have received the degree of doctor of medicine from some reputable medical college or university." (This, as amended by Sec. 2, Ch. 276, Laws 1933, is G. S. 1935, 74-101.)

Section 2 related to those then engaged "in the practice of medicine" in the state, and upon their application within a stated time, and upon a designated showing of their qualifications, authorized the board of medical registration and examination to issue to them certificates, which "shall be conclusive evidence that its owner is entitled to practice medicine and surgery in this state." (Now included by reference in G. S. 1935, 65-1002.)

Section 3 pertained to "all persons intending to practice medicine, surgery or osteopathy," and who had not complied with section 2, and required them to make application to the board of medical registration and examination, and to "submit to an examination of a character to test their qualifications as practitioners of medicine or surgery, and which shall embrace all those topics and subjects a knowledge of which is generally required by reputable medical colleges of the United States for the degree of doctor of medicine." This section contained the provision "that any graduate of a legally chartered school of osteopathy. . . . shall be given a certificate of license to practice osteopathy upon the presentation of such diploma." There were provisions for the issuance of temporary certificates. (This, as since amended, is G. S. 1935, 65-1001.)

Section 4 authorized the board of medical registration and examination to issue certificates "to practice medicine and surgery or osteopathy within this state." Such certificates were to be recorded in the office of the county clerk where

the holder resided and practiced. (This as since amended, is G. S. 1935, 65-1003.)

Section 5 pertained to the financial matters of the board of medical registration and examination. (This, as since amended, is G. S. 1935, 65-1004.)

Section 6, so far as here pertinent, reads:

"Any person shall be regarded as practicing medicine and surgery within the meaning of this act who shall prescribe, or who shall recommend for a fee, for like use, any drug or medicine, or perform any surgical operation of whatever nature for the cure or relief of any wounds, fracture, or bodily injury, infirmity of disease of another person, or who shall use the words or letters 'Dr.,' 'doctor' 'M. D.,' or any other title in connection with his name which in any way represents him as engaged in the practice of medicine and surgery; but nothing in this act shall be construed as interfering with any religious beliefs in the treatment of disease, provided that quarantine regulations relating to contagious diseases are not infringed upon. All persons who practice osteopathy shall be registered and licensed as doctors of osteopathy, as hereinbefore provided, but they shall not administer drugs or medicines of any kind nor perform operations in surgery. This act shall not apply to any commissioned medical officer of the United States army, navy, or marine service, in the discharge of his official duties; nor to any legally qualified dentist, when engaged in the legitimate practice of his profession; nor to any physician or surgeon who is called from another state or territory in consultation with a licensed physician of this state, or to treat a particular case in conjunction with a licensed practitioner of the state, and who does not otherwise practice in the state. Nor shall anything in this act apply to the administration of domestic medicines nor to prohibit gratuitous services; provided, any person holding a diploma issued by an optical college, and who has studied the anatomy of the eye and contiguous parts, human physiology and natural philosophy for at least six months under a competent teacher, and who shall pass examination satisfactory to the state board of medical registration and examination, shall be eligible to register as an optician or doctor of optics, and shall be otherwise governed by this act so far as the same is applicable." (This, as amended, is G. S. 1935, 65-1005.)

Section 7 prescribed penalties for any person "who shall practice medicine and surgery or osteopathy in the state of Kansas without having received and had recorded a certificate under the provisions of this act," or for violating other provisions of the act; and section 8 made it perjury for one falsely to swear or give testimony to procure such a certificate. (These, as since amended, are G. S. 1935, 65-1006, 65-1007.)

With slight amendments, not here important, this act remained in force until 1913, when Chapter 290, Laws of 1913, was enacted. This was an act "concerning the practice of osteopathy, creating a state board of osteopathic examination and registration," providing penalties for its violation, and amending and repealing sections 3, 4, 5, 6 and 7 of Ch. 254, Laws 1901. The first seven sections of this act relate



to osteopaths and the practice of osteopathy. Section 1 provided for the creation of "a state board of osteopathic examination and registration consisting of five members . . . who are reputable practitioners of osteopathy, and who are graduates of a reputable school or college of osteopathy, . . . who shall have been in active practice in the state of Kansas for at least three years," and its general duties were outlined. (This is G. S. 1935, 74-1201.)

Section 2 required "any person not now a registered osteopathic physician of this state, before engaging in the practice of osteopathy in this state, to make application to 'the board of osteopathic examination and registration,'" and to make a designated showing, or pass an examination. It required the board to "subject all applicants to a practical examination, as to their qualifications for the practice of osteopathy, in writing, in the subjects of anatomy, physiology, physiological chemistry and toxicology, pathology, diagnosis, hygiene, obstetrics and gynecology, surgery, principals and practice of osteopathy, and such other subjects as the board may require." The board was authorized to issue to a successful applicant "a certificate granting him the right to practice osteopathy in the state of Kansas, as taught and practiced in the legally incorporated colleges of osteopathy of good repute." Examination could be dispensed with in certain instances, and there was a provision for temporary certificates. (This is G. S. 1935, 65-1201.)

Section 3 defined "osteopathic school or college of good repute," as used in the act, to include "only such schools or colleges of osteopathy as are legally incorporated, and which prescribe a course of study covering the time provided for under the provisions of this act, and which shall instruct in all the branches of study in which examinations are required for license under the provisions of this act, . . . and the requirements of which shall be in no particular less than those prescribed by the American Osteopathic Association." (This is G. S. 1935, 65-1202.)

Section 4 pertained to the financial affairs of the board of osteopathic examination and registration. (This is G. S. 1935, 65-1203.) Section 5 required osteopathic physicians to observe all state and municipal regulations for the control of contagious diseases, reporting births and deaths, and all matters pertaining to the public health, "the same as all schools of medicine." (This is G. S. 1935, 65-1204.) Section 6 provided for the recording of the certificate in the office of the county clerk. (This is G. S. 1935, 65-1205.) Section 7 prescribed penalties for any person who in any way would use or attempt to use "the science or system of osteopathy in treating diseases of the human body" by fraud or misrepresentation, or otherwise violating, or failing to comply with, the provisions of the act. (This is G. S. 1935, 65-1206.)

The remaining sections of the act (Ch. 290, Laws 1913), 8 to 14, amended and repealed sections 3, 4, 5, 6 and 7 of Chapter 254, Laws 1901. While some other changes were made in the sections, the principal one was to remove from them all provisions of the act pertaining to the examination of osteopaths, and the authority of the state board of medical registration and examination to issue certificates to practice osteopathy. The statutes will be referred to further, when necessary, in the discussion of the specific questions submitted.

Since the enactment of these two statutes (Ch. 254, Laws 1901, and Ch. 290, Laws 1913), we have had two boards, composed of persons having different educational qualifications, issuing different types of certificates: (1) The board of medical registration and examination. This is composed of seven members, "who shall have received the degree of doctor of medicine from some reputable medical college or university." This board is authorized to issue certificates "to practice medicine and surgery" in this state. (2) The board of osteopathic registration and examination. This is composed of five members, reputable practitioners of osteopathy, graduates of a reputable school or college of osteopathy. This board is authorized to issue certificates "to practice osteopathy" in this state. By these statutes, and subsequent amendments thereof, the legislature has clearly recognized a distinct difference between the "practice of medicine and surgery" and the "practice of osteopathy."

Also, in 1913, the legislature enacted a statute (Ch. 291, Laws 1913) creating a board (G. S. 1935, 74-1301 to 74-1306) and authorizing it to issue a certificate to chiropractors (G. S. 1935, 65-1301 to 65-1311). Similar boards have been created and authorized to issue appropriate certificates to trained nurses (G. S. 1935, 74-1101 to 74-1105; 65-1101 to 65-1110); to dentists (G. S. 1935, 74-1401 to 74-1403; 65-1401 to 65-1415); to optometrists (G. S. 1935, 74-1501 to 74-1504; 65-1501 to 65-1513); to pharmacists (G. S. 1935, 74-1601 to 74-1602; 65-1601 to 65-1623); to embalmers and funeral directors (G. S. 1935, 74-1701 to 74-1705; 65-1701 to 65-1726); to barbers (G. S. 1935, 74-1801 to 74-1804; 65-1801 to 65-1807); to cosmetologists (G. S. 1935, 74-2701 to 74-2705; 65-1901 to 65-1910); to podiatrists (G. S. 1935, 74-2801 to 74-2804; 65-2001 to 65-2008). Each of these professions has its standards of educational and professional requirements. Unless a statute specifically authorizes it, the holder of one of these certificates is not authorized to engage in the practice of any of the other of the professions for which another certificate is required.

We shall now take up and determine the specific legal questions propounded by defendant, although perhaps some of them do not have a direct bearing upon the issues raised by the pleadings.

(a) Is the osteopathic statute prospective in operation, or (b) are osteopathic physicians limited to the state of the science and art as taught and practiced in 1913, when the statute was enacted? Answering the first part of this question, (a), the statute was prospective in operation; that is to say, it was designed to operate in the future. After the enactment of our first statute, recognizing osteopathy as a system or school of thought and practice for the treatment of the sick, injured, or afflicted, no one could practice osteopathy lawfully in this state unless he held a certificate authorizing him to practice osteopathy issued by the state board authorized by statute to issue such certificates. From 1901 to 1913 this was the state board of medical registration and examination. Since 1913 it has been the state board of osteopathic registration and examination. The statute did not operate retrospectively so as to punish those who had practiced osteopathy previous to the effective date of the statute. (b) Osteopathic physicians, meaning by that term those to whom certificates have been issued author-

izing them to practice osteopathy in this state by a state board authorized to issue such certificates, are limited to the practice of osteopathy in harmony with the fundamental principles of osteopathy, or what is sometimes spoken of as the science or system of osteopathy (G. S. 1935, 65-1206), as generally known and understood and as taught in osteopathic schools or colleges of good repute in 1901 and 1913. Osteopaths, in common with all scientific and professional men, are expected to continue to study, to make progress, to learn more about their profession, and to apply such knowledge in their practice, but they are still engaged in the practice of osteopathy, as that science or system was known and understood when our statutes about mentioned were enacted. They are not authorized to practice optometry (*State, ex rel., v. Eustace*, 117 Kan. 746, 233 Pac. 109), or any of the other professions which require a specific certificate of authority. If, as suggested by counsel for defendant, osteopathy has abandoned its fundamental opposition to drug therapy and operative surgery (meaning by this term surgery by the use of surgical instruments), and now includes the use of those things in its system, that fact never has been recognized by the legislature of this state. Our statutes continue to recognize the "practice of osteopathy" and the "practice of medicine and surgery" as separate and distinct things. A certificate authorizing one to practice osteopathy, whether issued prior to 1913 by the board of medical registration and examination, or since that time by the board of osteopathic registration and examination, never has been recognized by our statutes, nor by our courts, as authorizing its holder to engage in the "practice of medicine and surgery" in this state.

2. What judicial construction should be put upon the words "anatomy, physiology, physiological chemistry and toxicology, pathology, diagnosis, hygiene, obstetrics and gynecology, surgery, principles and practices of osteopathy" as used in the osteopathic statute? (G. S. 1935, 65-1201). This is simply a list of subjects in which an applicant for a certificate to practice osteopathy is required to take an examination. An osteopathic school or college of good repute is required to teach these subjects. (G. S. 1935, 65-1201). However, the certificate issued to a successful applicant is a certificate "to practice osteopathy." Defendant stresses the word "surgery" in this list and argues that surgery, as used in the osteopathic statute, means the same as it does in any other statute, and hence that a certificate to practice osteopathy authorizes its holder to practice surgery in any and all of its aspects and operations. This contention is too broad. The word is difficult to define (*Bouvier's Law Dict.*). It comes from two Greek words *the hand* and *work* (id.). Originally it was part of the profession of barbers, but later was taken up by physicians and now is recognized as the "branch of medical science, and more specifically, that branch of medical science which treats of mechanical or operative measures for healing diseases, deformities, or injuries." (48 C. J. 1065) Counsel for defendant call our attention to the fact that the phrase that those licensed to practice osteopathy "shall not administer drugs or medicines of any kind nor perform operations in surgery," contained in our 1901 statute (sec. 6, Ch. 254, Laws 1901), was omitted in the 1913 statute (Ch. 290, Laws 1913. That this was done intentionally, they

say, is evidenced by the fact that in the chiropractic act, passed at the same session of the legislature (Ch. 291, Laws 1913), a similar phrase was used with respect to chiropractors (G. S. 1935, 65-1301, clause (c)). They argue that the intentional removal of this restriction on osteopaths contained in the 1901 statute indicates a legislative intent to authorize osteopaths to administer drugs and perform operations in surgery without restriction. It seems clear the legislature intentionally omitted the prohibitory phrase contained in the 1901 act from the act of 1913 (Ch. 290), but it does not follow that thereby the legislature intended to confer unrestricted authority on osteopaths to administer drugs and perform operations in surgery. Considering the fact that surgery in its primitive and broadest sense includes adjustment of bones, muscles, ligaments and nerves by manual operation, and that skill in doing so is taught in osteopathic schools and colleges, and occupies a major place in the science or system of osteopathy, and in the practice of osteopathy, the prohibition against osteopaths performing operations in surgery contained in the 1901 act was, at its best, an inaccurately used expression, and should have been omitted for that reason alone. The science or system of osteopathy, generally speaking, strongly opposed the use of drugs as remedial agencies in treating the sick, afflicted, or injured, and osteopathic schools and colleges of good repute contained no course for the study of material medica; hence, there was no real occasion to prohibit osteopaths from using drugs, since they made no claim or pretense of doing so, nor did they study to qualify themselves for such use. Broadly speaking, their's was a drugless system of healing. Surgery, as well as obstetrics (*Yard v. Gibbons*, 95 Kan. 802, 149 Pac. 422), and each of the other subjects in which osteopaths were required to take an examination, were taught in the osteopathic schools and colleges of good repute, in harmony with the osteopathic theory or system of healing, and not as taught in the medical colleges and universities. So the word "surgery," as used in this statute, meant, in the main, surgery by manual manipulation. The general use of a knife or other instruments in surgical operations was regarded as unnecessary and opposed to the osteopathic system of treatment. Apparently the legislative intent of the act of 1913 (Ch. 290) was to recognize the system of osteopathy as then taught in its schools and colleges of good repute, and to authorize its practice by those who believed in and conformed to its teachings. Our legislature recognized that there is a broad field for the use of such a system of the healing art. If, as is suggested by counsel for defendant, osteopathic schools and colleges of good repute, and those who practice osteopathy, have abandoned their fundamental theory that surgery, in the main, should be confined to manipulation without the use of the knife and other instruments, that fact never has been recognized by the legislature or the courts of this state.

3. What judicial interpretation should be put on the phrase "as taught and practiced in the legally incorporated colleges of osteopathy of good repute" as used in the osteopathic statute? (G. S. 1935, 65-1201.) Such schools and colleges are defined in G. S. 1935, 65-1202. What was taught in them in 1913 was a matter of common knowledge. Their courses of study were available, as were the writings of its founder,



and other leading osteopathic teachers and practitioners. Osteopathy, or the science or system of osteopathy, could be as readily designated by the language used in the statute was in any other way. If there is any substantial controversy on this point, the controversy is one of fact rather than one of law.

4. Does the osteopathic practice act define osteopathy? In *State, ex rel., v. Eustace*, 117 Kan. 746, 233 Pac. 109, it was said in the opinion (page 747), "osteopathy is not defined, but for the purpose of the act it is sufficiently defined by reference to osteopathy as taught and practiced in the legally incorporated colleges of osteopathy of good repute."

5. If the osteopathic practice act fails to define osteopathy, is it void for uncertainty? The statute is not void for uncertainty in its failure more specifically to define osteopathy.

6. Does the osteopathic practice act delegate to the legally incorporated colleges of osteopathy the right to determine standards and scope of practice of osteopathy in Kansas? Yes, within the limits prescribed by statute (G. S. 1935, 65-1202), but this does not authorize the state board of osteopathic registration and examination to approve schools or colleges which do not conform their teachings to the fundamental principles of osteopathy.

7. If the osteopathic practice act does so delegate, is it void as an unconstitutional delegation of legislative power? The statute is not void on the ground of unconstitutional delegation of legislative power.

**8. Are osteopathic physicians in Kansas licensed (a) to administer drugs and narcotics and practice drug therapy, and are they licensed (b) to perform surgery under the provisions of the osteopathic practice act? Generally speaking, the answer to the first part of this question (a) must be in the negative, insofar as such drugs are given as remedial aids. To the second part of the question (b) the answer must be yes, if confined to surgery as the same was taught and used as a part of the osteopathic system of healing,—which in the main was by manipulation—and the answer should be no, if it extends beyond this into the general field of operative surgery with surgical instruments.** In this connection the briefs put to us specific questions, such as: May one licensed to practice osteopathy, under state circumstances, administer a simple drug, or a specific drug, for remedial purposes, or use surgical instruments? We are not called upon to answer detailed questions of that character, nor would we deem it proper for us to do so. We are called upon to interpret our statutes. We have no difficulty in finding that our legislature recognized the practice of medicine and surgery as one thing, and the practice of osteopathy as another, and that it regarded both schools of healing as having merit, and the practice of each was authorized. Although founded on different basic ideas they seek to attain the same objective,—namely, the curing or reducing the injurious effects of diseases or injuries to mankind. The legislative purpose was to protect citizens of the state from those who would attempt to accomplish such purposes by means which they had not studied, or were otherwise unqualified to use. As in other schools of thought having a common object in view, such as religion or political science, while fundamental differences exist, there may be ideas or practices in common. Profes-

sional men of high standing seldom have serious difficulty with such details. Our legislature dealt with the two schools of healing in terms quite general, and that is the viewpoint we take. It is possible the classification made by the legislature is sufficiently definite so that the detailed specific questions presented in the briefs, and others of a similar character, can be answered, but if so, they partake more of questions of fact than of pure questions of law.

9. What judicial interpretation should be put on the phrase "This act shall not apply to any registered osteopathic physician or any chiropractic practitioners of the state of Kansas, or any commissioned medical officer of the United States Army, navy or marine service in the discharge of his official duties; not to any legally qualified dentist, when engaged in the legitimate practice of his profession;" as used in the medical practice act? (G. S. 1935, 65-1005.) Earlier in this opinion we quoted in full section 6 of Chapter 254, Laws of 1901, in the latter part of which is a statement as to whom the act did not apply. When that section was amended in 1913 (Sec. 10, Ch. 290, Laws 1913, now G. S. 1935, 65-1005, the language quoted in this question was used. As applied to osteopaths, we think it meant no more than that one who desired to practice osteopathy should not be required to make application to the state board of medical registration and examination and have that board pass upon his qualifications and issue to him a certificate to practice osteopathy. Counsel for defendant contend that the language used must be taken in its full literal sense, and by so construing it the legislature meant to say, and in fact did say, that none of the provisions of the medical practice act (now G. S. 1935, 65-1001 to 65-1008) applies to osteopaths; hence, that osteopaths may "practice medicine and surgery" in all particulars with impunity. This contention cannot be sustained. It would render ludicrous and nugatory the work of the legislature in treating the practice of medicine and surgery as one thing and the practice of osteopathy as another, and in establishing two state boards, one of medical registration and examination and the other of osteopathic registration and examination, each authorized to issue certificates to practice for the respectively different purposes. Defendant argues that in the interpretation of statutes all the language used in the statute should be given full force and effect. That may be stated as a general rule, but a more important rule is that in determining the legislative intent in enacting a statute the general purpose of the legislature, as shown by the statute as a whole, is of primary importance. Words, phrases and figures used in the statute should be construed in harmony with that general purpose. If, standing alone, a phrase will render that general purpose nugatory, it should be disregarded, if need be, in order to give purpose to the legislative enactment. In the late case of *Marlin v. Cardillo*, 95 F. 2d 112, it was said page 115) "it is a well-settled rule of construction that the letter of a statute will not be followed when it leads to an absurd conclusion or a meaningless result. *Nautzel v. Ryans*, 184 Ky. 292, 211 S. W. 852; *Coney v. City of Topeka*, 96 Kan. 46, 149 P. 689; *Tatlow v. Bacon*, 101 Kan. 26, 165 P. 835, 14 A. L. R. 269; *Anderson v. Town of Friendly*, 86 W. Va. 554, 104 S. E. 48. See, also, *Sinclair v. United States* 279 U. S. 263, 286, 49 S. Ct. 268, 272, 73 L. Ed. 692."

Many other authorities to the same effect may be found in the General Digest, under Statutes, key number 183.

10. Does the petition state a cause of action for violation of the medical practice act, or for a violation of the osteopathic practice act? It is difficult to see the purpose of this question. From a reading of the petition it seems clear that defendant is charged with doing all the things he could do if he had the certificate to practice medicine and surgery; that he has no such certificate, and that the only certificate he has is one to practice osteopathy.

11. Can the right of defendant to practice in Kansas be attacked collaterally, as in this action, or is the proper action one to revoke his license for exceeding the powers granted thereunder? This question assumes that the attack here is a collateral one. The assumption is erroneous. It is a direct attack by the state, on the relation of the attorney general, in an action specifically authorized by Chapter 270, Laws 1937. We do not have before us the question whether defendant's certificate to practice osteopathy might be revoked because of the facts alleged in the petition; hence, we express no view on that question. Having answered the questions propounded by defendant, we await suggestions of counsel as to what further orders should be made or proceedings had in this action.

---



---

## CANCER CONTROL

---



---

### THE X-RAY DIAGNOSIS OF BONE TUMORS

C. H. Warfield, M.D.

Wichita, Kansas

The x-ray diagnosis of bone tumors and allied conditions resembling bone tumors is not as easy as articles and text books would lead one to believe. Many tumors with the same microscopic appearance may produce different shadow densities by x-ray. The x-ray study and its reliability depends upon whether the particular tumor produces an abundant amount of new bone or just destruction. We will only attempt to state some of the more classical x-ray and pathological findings in certain more common bone lesions.

Exostosis are usually multiple, hereditary, arising near the epiphysis, always growing away from the joint. They usually have broad base attachments with more or less pointed ends. The structure is like cancellous bone, yet, less dense. They may cause deformities by pressure on adjacent bones and pain when irritated by tight clothing.

Osteomas usually are single, found mostly at the epiphysis of long bones, growing away from the

joint. They are usually attached to shaft of bone by a dense narrow pedicle then expanding into a cauliflower mass in which areas of cartilage are seen. The mass is well defined with cortex intact.

Chondromas are usually found in phalangeal bones of the hands as areas of lessened density, medullary in origin, cortex thinned, lesion well demarcated resembling bone cyst. They are rare in the bones of the feet. Multiple chondromas may produce new bone, thus resembling sarcoma, especially if they originate in the periosteum.

Giant cell tumor is a single lesion, medullary in origin with thinning of cortical bone by pressure, no periosteal reaction, well defined with smooth sharp border. They have a cyst-like appearance and many times have multilocular trabeculations. Treatment consists of operative removal followed by roentgen irradiation.

Fibrosarcomas usually begin in the medulla, near the end of the shaft of a long bone. They destroy cancellous and eventually cortical bone. No new bone formation except slight periositis. X-ray shows central reduction in density with ragged worm eaten appearance. Treatment consists of extensive radiation followed by amputation.

Osteogenic sarcoma usually begins in the end of the shaft of a long bone infiltrating cancellous interior and extending through the cortex to form an oval swelling, thus involving all three layers of bone, producing ragged uneven borders. Most cases show more bone destruction than bone proliferation. Not all of the new bone formation is tumor bone, but a great deal may be non-tumor bone. The usual x-ray appearance is central medullary destruction extending through the cortex and periosteum producing the more or less typical sun-ray picture. If the tumor is slow growing the laminated periosteal picture will be seen. Metastases are usually hematogenous and carry the characteristics of the primary tumor. In view of the fact that these tumors are radio-resistant it would seem that amputation is to be preferred. However, the fractional application of highly filtered rays up to a total of 8000 "r" has not been given a trial previous to amputation. Most x-ray treatment in the past has not been sufficient due to the fact that many radiologists have been afraid to go into the higher dosages.

Ewing's sarcoma usually involves the middle section of the shaft of a long bone, involving more length of bone than other sarcomas. It begins in the medulla eventually eroding the cortex extensively. In some cases it lifts the periosteum and new bone is put down. This same process may be repeated so that several layers of new bone are laid



down. This gives the lesion the onion-like appearance. However this may also be seen in subacute or early chronic osteomyelitis. In other cases it may grow rapidly producing the typical sun-rays. In most cases a triangular wedge of bone is seen at the upper or lower level of the tumor. The treatment advocated has been radiation alone. However, we believe this should be followed by amputation.

Multiple myeloma as the name implies is a multiple tumor of the hematopoietic bone marrow. It is characterized by the fact that it is a pure osteolytic process with no periosteal or endosteal new bone. The tumor masses produce rounded or oval punched out areas of lessened density with no alteration in adjacent bone, however, metastatic carcinoma may look quite similar. The absence of a primary tumor and lung metastases is important.

Metastatic carcinomas are rarely seen below the elbow or knee joints and are more frequently in the upper humerus and lower femur. There are two distinct types depending upon the osteogenic effect on the skeleton. Osteoplastic metastases produce some bone absorption but the most striking effect is its ability to produce new bone. The result is a dense spongy bone throughout the metastases, yet, confined to the interior of the bone. Osteolytic metastases have much the same distribution, but, they destroy bone without ossifying and produce little if any new bone. Extension through the cortex is frequent as well as fractures. The shadows are multiple, irregular in outline and isolated lesions are larger than in multiple myeloma. Chest metastases and the primary tumor are most important in making the diagnosis.

Paget's disease shows different x-ray appearances in the long and flat bones. In the long bones the shaft is thickened, many times curved, with loss of the old cortex and replacement by bone that makes it thicker, less dense and wavy. The medullary cavity is either absent or reduced in diameter. The disease usually involves only the middle two-thirds of the shaft and the wavy, heavy lines make shadows resembling cysts. In the pelvis it resembles osteoplastic metastatic malignancy, the difference being that Paget's disease causes increased thickening of bone with deformity and the tendency to produce the wavy white lines. In the skull Paget's produces increased thickening of the tables with irregular fuzzy islands of increased density.

Myositis ossificans begins as the result of a chronic irritation to muscles or of a violent sudden injury. It is characterized by linear calcification in

the muscle bands, paralleling the shaft of the long bone. It may simulate the periosteal type of sarcoma in its early manifestations. As the disease progresses it will be noted that the calcification is confined to the muscles, with no relation to the bone and that it has become more dense and is well defined without the usual ill-defined limits of a sarcoma.

Osteomyelitis in the subacute and chronic forms may simulate bone sarcoma. Some forms of osteomyelitis produce parallel layers of new bone much like that seen in Ewing's sarcoma. Sclerosing forms may simulate Paget's disease or osteoplastic malignancy, either primary or secondary. Localized forms may have the same appearance as bone cysts. Syphilitic gumma may produce sclerotic new bone, which may be parallel to the shaft in several layers or perpendicular to the shaft. Tuberculous osteomyelitis produces periosteal reaction in many cases very similar to Ewing's sarcoma.

---

## EYE, EAR, NOSE & THROAT

---

### INCLUSION BLENNORRHEA

George F. Gsell

Wichita, Kansas

In a brief discussion of this conjunctival disease a case report is first recorded because it shows a typical picture of the age of onset, signs, bacteriology and course of acute inclusion blennorrhoea as it occurs in the new-born.

The patient, Baby S, was born on February 6, 1937, in a local hospital. The mother was under excellent pre-natal care, and showed no general, or local vaginal pathology while carrying the baby. Labor was uneventful, and the usual prophylactic eye drops were instilled in the baby's eyes within an hour after birth.

The infant was normal until the sixth day when its right eye became red and inflamed. Two smears showed no bacteria when stained by Gram's stain. When I saw the patient a day later the right upper lid was definitely swollen and there was a profuse amount of yellowish pus running out from between the lids. The eyeball was examined with difficulty because of the lid edema. There was a definite chemosis of the bulbar conjunctiva. The tarsal conjunctiva, especially that of the lower lid was beefy red, and its center was covered by a white pseudo membrane, which was removed with difficulty and which left a bleeding surface. The cornea was clear, and as far as could be determined, the interior of the eye was

# BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

## IV. SEALING THE TIN CONTAINER

**B**RIEFLY, the method of food preservation commonly known as "canning" involves subjecting food in a permanently sealed container to a heat process. The heat process destroys spoilage organisms present on the raw food material; the seal on the container prevents reinfection of the food by such organisms. It is, therefore, obvious that the sealing operation—"closing" or "double-seaming" as it is known in the industry—is one of the most important in the canning procedure.

The manufacture of tinplate and "sanitary" cans is described elsewhere (1).

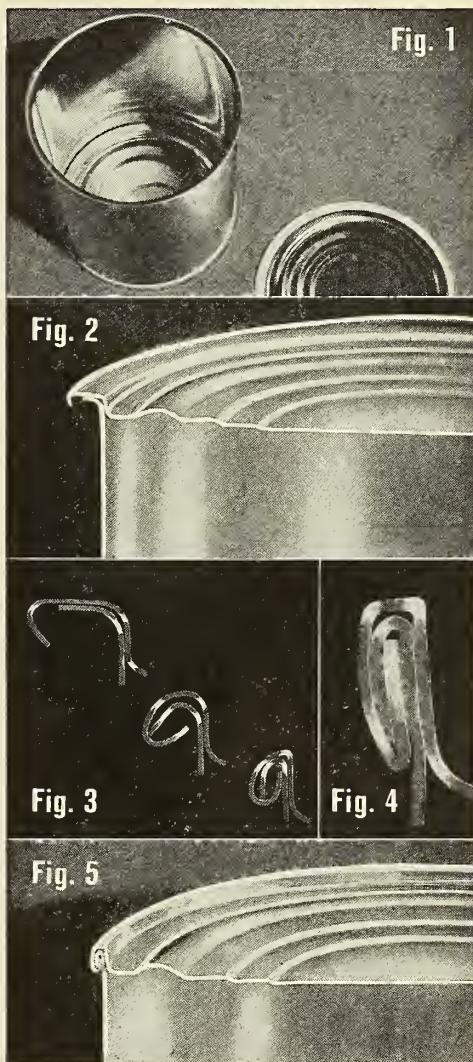
The open cans are received at the cannery in paper cartons or in washed paper-lined box cars, together with the covers which are contained in fiber shipping tubes. Figure 1 shows a can and end ready for use.

In modern canning practice, the cans are first conveyed by automatic runways to can washers, and thence to the filling tables or fillers where the correct amount of properly prepared raw food is put into the cans. The covers or "ends" are placed in the automatic sealing or "closing" machine to which the open can containing the food is mechanically conveyed. In this machine the ends are "double-seamed" onto the can. This operation is portrayed by the accompanying cross-sectional pictures.

In Figure 2 is shown the relation of can to cover before the sealing operation is started; note the relative position of the "curl" on the cover and the "flange" on the can. In this curl, the can manufacturer has placed a gasket or "compound," usually containing rubber. Figure 3 is a series of photographs illustrating the sealing operation in which the curl and flange are first rolled into position and then the layers of metal flattened together to form the final "double-seam" in Figure 4. The rubber compound originally present on the cover supplies the binding material between the layers of metal necessary to insure a permanent or hermetic seal on the container. Figure 5 illustrates in cross-section a closed sanitary can as it comes to the consumer.

In the past twenty-five years great progress has been made in the development of tinplate, compounds and automatic sealing machines. Collectively, these developments enable present-day canners to impose a permanent seal on the cans containing their products more easily and rapidly than ever before in the history of canning.

(1) The Story of the Tin Can, American Can Company, New York, 1935



## AMERICAN CAN COMPANY

230 Park Avenue, N. Y.

*This is the thirty-seventh in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



normal. The left eye appeared about normal except for a slight conjunctival irritation. The baby had a slight temperature.

Two smears had been negative so epithelial scrapings were gently taken. Treatment, of course, was started. The smears stained by Gram did not show any bacteria, but on those stained by Giemsa, and decolorized slightly by ninety-five per cent alcohol, typical epithelial cell inclusions were seen.

The treatment consisted of isolation, proper restraint of the hands, and copious boric acid irrigations of the eye applied frequently enough to keep the conjunctival sac free of pus. At first this was done every hour throughout the day and several times at night. An antiseptic was instilled in both eyes every three hours.

On the ninth day of life the right eye was slightly better but the left became involved, appearing as had the right eye. Soon both eyes began to improve so that by the seventh day of the infection the secretion and edema had subsided, but the conjunctiva, especially the lower tarsal, remained rough and red.

The child continued to improve, and was followed for five weeks, when the conjunctiva was normal in color but still contained numerous follicles.

This case history illustrates the important points in this more or less acute conjunctival disease. There are mild forms which are probably confused with reactions to silver nitrate. The incubation period is from five to nine days. The disease may begin unilaterally but almost always becomes bilateral, and is characterized by a more or less severe conjunctival inflammation, edema, and discharge which persists acutely from one to two weeks, and is followed by a chronic treatment resistant follicular type of conjunctivitis located chiefly on the lower tarsal conjunctiva, for from five to twelve months. There is rarely any permanent damage to the eye. A persistent rhinitis frequently accompanies the disease. Pseudomembranes are not uncommon. Secondary bacterial infection may occur. This is not a rare disease, but it is overlooked.

The pertinent history of inclusion blennorrhea dates back to 1903 when Morax described a series of cases of acute conjunctival inflammations in infants, without any bacteriological findings. Then in 1907 Halberstaedter and Prowazek discovered inclusion bodies in the epithelial cells in cases of trachoma. It was thought that the inclusions were characteristic of trachoma, but soon other investigators reported the same inclusions in the types of cases which Morax had described, and also in other cases along with the gonococci and pneumococci. By 1911 Linder had studied more than a hundred such cases, in which only four were associated with gonococci, had transmitted the disease to the monkey, and called it inclusion blennorrhea, a clinical entity.

Interest as to the source of the infection led to the finding of typical inclusions in the urethral epithelium of several mothers and one father of infected infants.

The workers in this field were further concerned as to the nature of the inclusions. Some thought they were inspissated bacteria, others, reactions of the cells to irritation, and others that they were the virus or infective agent itself. This discussion still goes on. The whole problem has been immeasurably clarified by the careful work of Thygeson, who investigated nineteen cases of this disease from 1934 to 1936 and studied them thoroughly. His results are interesting.

He indicated that the inclusions are morphological entities and that they are the infective agents in the disease. He worked out the intracellular life cycle and showed that the inclusions consist of two types, the initial bodies, which are large cocco-bacillary bodies and stain deep blue with Giemsa; and the elementary bodies, which are smaller, more numerous, and stain a reddish blue. He showed that the initial bodies develop into the elementary bodies and that the elementary bodies are probably the infective stage. He showed the cycle within the cells to be forty-eight hours. This latter finding is similar to that in psittacosis.

He transmitted the infection both before and after filtration through a small pore filter to human eyes and baboon eyes and to the cervixes of baboons. He was unable to transmit the infection by filtrates from a filter with pores small enough to prohibit the passage of the inclusions. He investigated, as have other men, the hook-up of this disease with swimming pool conjunctivitis of adults, and found the inclusions present and transmissible in the same manner. Swimming pool conjunctivitis is a similar bacterial free acute conjunctivitis occurring in adults, of long duration, occasionally occurring in epidemics, which have been traced to swimming pools.

Thygeson investigated further the genital origin of the disease, and was able to transmit the inclusions, which he had found in the cervix of a mother to the eye of a baboon, and to cause a typical infection with inclusions. Conversely, he induced a cervicitis in female baboons by material from an infected infant's eye. He examined a hundred mothers as they entered the obstetrical clinic and found inclusions in one case. That mother's child developed the disease.

The gynecologists do not recognize a clinical entity which could be due to these organisms. However, in 1934 Hamburger, in Germany, reported that twenty of thirty mothers whose children developed the disease reported a marked discharge during pregnancy. In five, the symptoms suggested gonorrhea but no gonococci could be found.

**16,000****ethical**

Since 1902

**practitioners**

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

**\$1,500,000 Assets**

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited with the State of Nebraska**

for the protection of our members residing in every State in the U.S.A.

**PHYSICIANS CASUALTY ASSOCIATION**

**PHYSICIANS HEALTH ASSOCIATION**

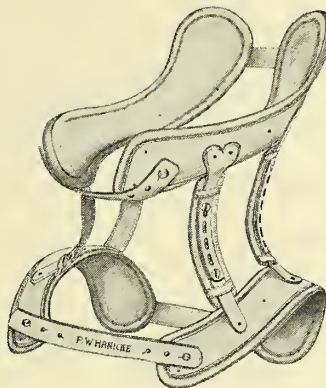
400 First National Bank Building  
**OMAHA - - - NEBRASKA**



Since 1912

## Apparatus for Fracture of Cervical Vertebrae

(Our Design)

**P. W. HANICKE MFG. CO.**

1013 McGee Street  
KANSAS CITY, MO.

Tel. Victor 4750

# THE Lattimore Laboratories

**TOPEKA, KANSAS****J. L. Lattimore, M. D. Director****A. C. Keith, B. S. Chemist****Allen Gold, M.A., M.T.****H. C. Ebendorf, M. T.**

**We invite consultation about the case that needs pathological service.**

**Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00**

*Containers furnished upon request.*

**OFFICES:****Topeka, Kansas****El Dorado, Kansas****Sedalia, Mo.****McAlester, Okla.**



From the work of Thygeson, much of which is a careful repetition and correlation of earlier work, it can be concluded that inclusion blennorrhea of infants and swimming pool conjunctivitis are caused by the same organism, and that the infection is usually of genital origin. Whether the inclusions are the infective organisms is not entirely proved, but they are constantly present and their demonstration by Giemsa stain serve to make the diagnosis.

---

## MEDICAL ECONOMICS

---

### A PREVENTIVE QUARTETTE

The enthusiasm and zeal with which the medical profession of our state seizes upon new means of treatment of disease for its clientele argues well for its future in this state. No higher type of thought or sense of duty than ours graces any other profession.

#### ENTHUSIASM

Enthusiasm, youth's asset, is the dynamo of human actions. The worst bankrupt in the world is the man without enthusiasm. May our Association never lose the strength and influences of enthusiasm.

#### SINCERITY

Mark Twain once said, "An injurious truth has no merit over an injurious lie. Neither should ever be uttered." Freedom from hypocrisy or pretense, the simple truth in all dealings with patients, makes a physician loved by all he serves.

#### AFFABILITY

It is the virtue of patience, the courtesy of understanding, the tact of wisdom, the keeping young enough to laugh with little children and sympathetic enough to be considerate of old age; practiced each day it will bring large measures of happiness.

#### COMMON SENSE

Common sense is a judicious, reasonable, intelligent understanding of a neighbor's problems. It teaches us not to expect too much of life, that a certain amount of friction and certain number of disappointments are inevitable.

Your Medical Advisory Committee believes that properly directed enthusiasm, sincerity of purpose, affability in demeanor, and the practice of common sense will lessen the malpractice menace and build up a solid, cooperative profession among our 2,300 members free from the malice of misunderstanding. —Minnesota Medicine, July, 1937.

### UNITED ACTION

"The changing times and the many onslaughts by social and other theorists necessitate new lines of offense and defense in professional practice. Proper union between the members of the medical, dental, pharmaceutical, and also the nursing professions would go far in making for better protection of the public health, and at the same time aid materially in the maintenance of professional standards and aims."

"In the domain of the public health, physicians, dentists and pharmacists all have heavy and interlocking responsibilities, as witness in infectious diseases, focal infections, food and drug, and also narcotic violations."

"We present this thought as worthy of careful consideration by the officers and members of these three respective professions, each of which, in recent years, has suffered attacks from special interests, resulting in battles which might have been fought to a more successful conclusion had the united strength of the three professions of medicine, dentistry and pharmacy been brought into play."—California and Western Medicine, August, 1937.

---

## TUBERCULOSIS CONTROL

---

### THE FORD COUNTY PLAN

The Ford County Tuberculosis Clinic is held under the auspices of the Ford County Medical Society. This clinic is held once every two months on the second Friday of the month, which is also the regular meeting date of the Ford County Medical Society. Clerical services for keeping records of the patients examined are furnished without charge by a member of the Red Cross organization, who is present at the time of the clinic. St. Anthony's Hospital also furnishes one or two nurses as needed by the physician.

The clinic is held in the basement room of St. Anthony's Hospital, which is in close proximity to the x-ray room and laboratory so that the necessary facilities for various laboratory tests, x-ray, and fluoroscopic examinations are easily available.

The pay and part-pay patients attending this clinic must either be accompanied by their physician or must have a letter from their physician. The letter states whatever the doctor might wish to say concerning the clinical findings of the patient and also gives the status of the patient's ability to pay. The Ford County Medical Society feels that the services of the consultant are worth some recompense and therefore this is not run as a free clinic

# Accept this Invitation

**E**VEN without previous experience, YOU can make extremely accurate electrocardiograms with a minimum of manipulation and at small expense with the entirely new light-weight, low-priced G-E Electrocardiograph.

You can obtain all of electrocardiography's recognized advantages from this compact, sturdy, dependable instrument—vitally important clinical information to aid materially in diagnosis and prognosis.

You can depend upon the new G-E Electrocardiograph to give faithful, economical service in office, home, or hospital. It is substantial; light enough to be truly portable, heavy enough to assure durability. There are no gadgets or "trick" electrical circuits to complicate operation; instead, there is that all-too-rare combination of precision and simplicity that is the mark of sound engineering and years of experience in careful manufacturing.

To inspect and operate the G-E Electrocardiograph is to realize how valuable it would be to you in your daily practice (and, if we may say so, what an excellent investment it would be). Won't you accept a cordial invitation to actually make a cardiogram on it—in your own office—at your convenience—and without incurring any obligation? Detach and mail the convenient coupon—now.

## GENERAL ELECTRIC X-RAY CORPORATION

2012 Jackson Blvd. • Chicago, Ill.

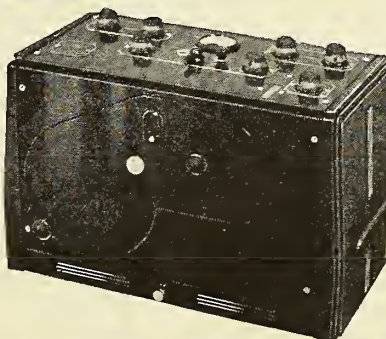
Have your local representative arrange with me so that I may inspect and operate the new G-E Electrocardiograph.

Name .....

Address.....

City .....

Dept. A56





for the full-pay and part-pay patients. These patients are told that they are expected to pay for their examination. If, however, the physician sending the patients feel that they are not able to pay no charge is made for the examination except for laboratory and x-ray, which is paid by the county on a cost plus basis.

The county indigent cases are so designated by the Ford County Welfare Director with the agreement that a small amount be paid for the laboratory and x-ray work. The County also takes care of the cost of the laboratory and x-ray examination in the part-pay patients.

The consultant examiner for the clinic is Dr. C. F. Taylor from the State Sanatorium at Norton. The consultant makes no charge on the indigent cases and the pay patients are charged according to ability to pay as indicated by the physicians who send the patients.

In the event the examining physician does not have enough paying patients in the clinic to pay his expenses the Ford County Medical Society reimburses him up to the amount of his actual expenses.

The Ford County Medical Society feels that this type of clinic has the following advantages:

1. The patient cannot come to the clinic except when sent by their private physician or by the Ford County Welfare Board.

2. The patients are referred back to their private physicians with a report of the examination.

3. This is not a free clinic, although of course the indigent receive this care at the clinic at the expense of the county, but the pay-patients pay according to their ability to pay and are not led to expect free medical care.

#### SYPHILIS CONTROL IN SEDGWICK COUNTY

(Continued from Page 255)

5. To maintain close supervision of all syphilitic women who are pregnant.

6. To cooperate with the private physician and city physician in all cases of syphilis control.

The examination of the cerebro-spinal fluid in all cases of syphilis has become indispensable. It has been definitely shown that neuro-syphilis can be recognized by spinal fluid examinations before the appearance of secondary lesions. It is known that abnormalities of the spinal fluid, often of the most pronounced type, precede by months or even years the first signs that can be elicited by neurological examination. We, in the clinic, routinely examine the spinal fluid in all cases past the earliest primaries. Because of the large number of exami-

nations and the crowded facilities, we have used the cistern puncture instead of the spinal puncture method.

Since opening the clinic about six hundred cistern punctures have been done without any untoward reactions. Of this number about one hundred have been shown to have cerebro-spinal syphilis. Malaria therapy has been used on seventy-six cases, and other forms of heat therapy, such as hot water baths, electric blanket, and divided doses of typhoid were used on all other cases. Many cases are now in remissions who otherwise would be in our overcrowded state institutions.

In the four years the syphilitic clinic has been in operation, we have increased the number of patients taking regular treatments from seventy-five to over two hundred fifty. Although we are cognizant of the fact that all who need treatment are not yet taking them, we have every reason to believe that if every community would work out such a plan of prevention, within a few years a noticeable reduction in primary lesions would be noted.

In the past decade scientific opinion has crystallized, especially with regard to the treatment of syphilis. Authorities are now agreed that much progress can be made in the control of syphilis during the next few years if modern knowledge is accurately applied. With a campaign and equipment comparable to that which has reduced our mortality from tuberculosis, our grandchildren may think of syphilis as we think of leprosy today.

#### SUMMARY

The cardinal principles of syphilis control are:

1. Adequate treatment for all cases of active syphilis.

2. Isolation of all cases which might transmit the disease.

3. Finding all cases of syphilis and bringing them in for treatment.

4. Routine Wassermanns for all pregnant women.

5. Compulsory treatment of uncooperative patients.

---

GRADUATE COURSE—The Michael Reese Hospital in Chicago offers a Graduate Course in Electrocardiography for two weeks commencing August 22 and continuing through September 3. Dr. Louis N. Katz, Director of Cardiovascular Research of the hospital will conduct the course and it will be open to the beginning and advanced student in electrocardiography. Reservations must be made early as the number in the class will be limited. For further information concerning the course, address The Medical Librarian, Michael Reese Hospital, 29th and Ellis Avenue, Chicago, Illinois.

# RADIUM

## —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

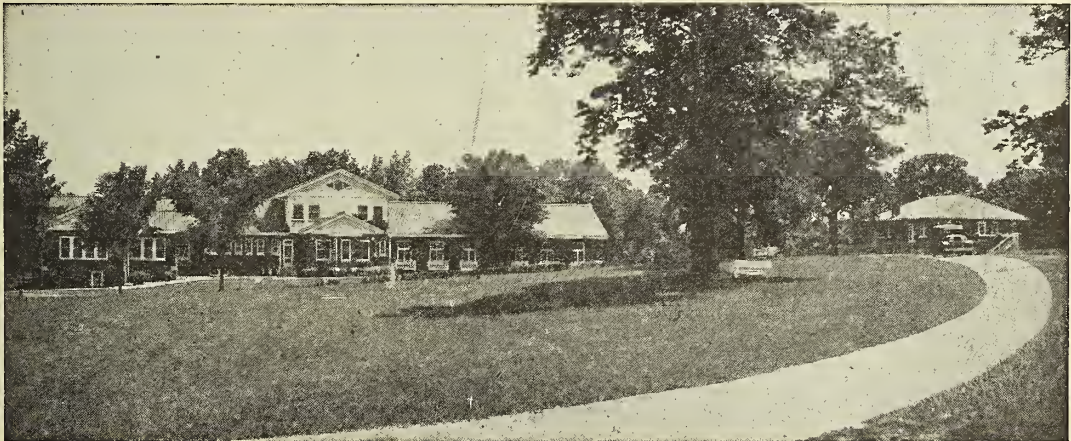
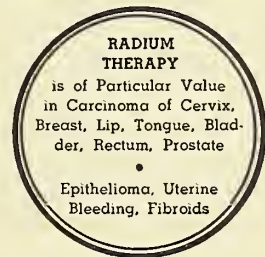
The complete service for Radium users

For details, address

**RADIUM AND RADON CORPORATION**

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO



# OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request

**OAKWOOD SANITARIUM**  
Tulsa, Oklahoma, Route 6

NED R. SMITH, M.D.  
Medical Director

S. CHARLTON SHEPARD, M.D.  
Attending Internist

T. N. NEESE  
Business Manager

DAISY N. NEESE  
Superintendent



## NEWS NOTES

### COMMITTEES

Dr. N. E. Melencamp, President, has announced the following committees to serve during his year as President, May 12, 1938, to May 5, 1939:

#### AUXILIARY

Omer C. West, M.D., Chairman	Kansas City
Cyril V. Black, M.D.	Pratt
L. B. Gloyne, M.D.	Kansas City
N. C. Morrow, M.D.	Parsons
Omer M. Raines, M.D.	Topeka

#### BORDERLINE GROUPS

George F. Milbank, M.D., Chairman	Wichita
Henry F. Haskins, M.D.	Kingman
K. Armand Fischer, M.D.	Arkansas City
Charles Rombold, M.D.	Wichita
George E. Paine, M.D.	Hutchinson
E. C. Eitzen, M.D.	Hillsboro

#### CONSERVATION OF EYESIGHT

Lyle S. Powell, M.D., Chairman	Lawrence
George Gsell, M.D.	Wichita
H. L. Kirkpatrick, M.D.	Topeka
W. M. Scales, M.D.	Hutchinson
Clifford Mullen, M.D.	Kansas City
J. G. Janney, M.D.	Dodge City

#### CONTROL OF CANCER

C. C. Nesselrode, M.D., Chairman	Kansas City
L. G. Allen, M.D.	Kansas City
C. D. Blake, M.D.	Hays
F. R. Croson, M.D.	Clay Center
A. W. Fegtly, M.D.	Wichita
James Hibbard, M.D.	Wichita
M. B. Miller, M.D.	Topeka
Howard Snyder, M.D.	Winfield
Marion Trueheart, M.D.	Sterling

#### CONTROL OF TUBERCULOSIS

H. N. Tihen, M.D., Chairman	Wichita
E. K. Musson, M.D.	Topeka
J. G. Hughbanks, M.D.	Independence
C. H. Lerrigo, M.D.	Topeka
N. C. Nash, M.D.	Wichita
C. F. Taylor, M.D.	Norton
R. L. Gench, M.D.	Fort Scott
F. S. Hawes, M.D.	Russell

#### ENDOWMENT

H. L. Chambers, M.D., Chairman	Lawrence
F. C. Boggs, M.D.	Topeka
J. L. Grove, M.D.	Newton
P. A. Pettit, M.D.	Paola
E. S. Edgerton, M.D.	Wichita

#### HOSPITAL SURVEY

A. R. Hatcher, M.D., Chairman	Wellington
V. E. Chesky, M.D.	Halstead
I. E. Hempstid, M.D.	Hutchinson
L. C. Joslin, M.D.	Harper
C. E. Joss, M.D.	Topeka
M. F. Russell, M.D.	Great Bend
Cecil D. Snyder, M.D.	Winfield

#### MATERNAL AND CHILD WELFARE

Ray A. West, M.D., Chairman	Wichita
L. A. Calkins, M.D.	Kansas City
W. A. Grosjean, M.D.	Colby
C. Meredith, M.D.	Emporia
H. R. Ross, M.D.	Topeka
B. I. Krehbiel, M.D.	Topeka
Porter Brown, M.D.	Salina
Howard Clark, M.D.	Wichita

#### MEDICAL ECONOMICS

F. L. Loveland, M.D., Chairman	Topeka
I. R. Burket, M.D.	Ashland
L. V. Dawson, M.D.	Ottawa
H. M. Glover, M.D.	Newton
R. G. Klein, M.D.	Dodge City
J. F. Gsell, M.D.	Wichita
A. L. Hilbig, M.D.	Liberal
W. N. Mundell, M.D.	Hutchinson
B. A. Nelson, M.D.	Manhattan
A. J. Revell, M.D.	Pittsburg
E. N. Robertson, M.D.	Concordia

#### MEDICAL HISTORY

W. S. Lindsay, M.D., Chairman	Topeka
J. A. H. Peck, M.D.	St. Francis
F. E. Coffey, M.D.	Hays
G. L. Kerley, M.D.	Topeka

#### NECROLOGY

C. W. Walker, M.D., Chairman	Eskridge
A. E. Gardner, M.D.	Wichita
J. H. O'Connell, M.D.	Topeka

#### PHARMACY

R. W. Moore, M.D., Chairman	Lansing
H. W. Duvall, M.D.	Hutchinson
Harry Lutz, M.D.	Augusta
J. B. Ungles, M.D.	Saranta
A. J. Brier, M.D.	Topeka

#### PUBLIC HEALTH AND EDUCATION

N. P. Sherwood, M.D., Chairman	Lawrence
Robert M. Carr, M.D.	Junction City
W. G. Emery, M.D.	Wilson
Earl Mills, M.D.	Wichita
C. T. Moran, M.D.	Arkansas City
J. N. Sherman, M.D.	Chanute
Maurice Snyder, M.D.	Salina
E. P. Deal, M.D.	Dighton
G. R. Hastings, M.D.	Lakin

#### PUBLIC POLICY AND LEGISLATION

E. C. Duncan, M.D., Chairman	Fredonia
W. F. Bernstorff, M.D.	Winfield
L. L. Bresette, M.D.	Kansas City
D. R. Davis, M.D.	Emporia
G. B. Morrison, M.D.	Wichita
Robert Sohlberg, M.D.	McPherson
R. W. Urie, M.D.	Parsons
R. W. VanDeventer, M.D.	Wellington
E. M. Ireland, M.D.	Coats
R. G. Ball, M.D.	Manhattan

#### SCHOOL OF MEDICINE

F. J. McEwen, M.D., Chairman	Wichita
Fred E. Angle, M.D.	Kansas City
J. A. Blount, M.D.	Larned
L. F. Schumacher, M.D.	Meade
L. R. McGill, M.D.	Hoisington
Philip W. Morgan, M.D.	Emporia
J. M. Porter, M.D.	Concordia
L. B. Spake, M.D.	Kansas City



**YOU'RE**

**SELECTED**

When you are called out on a case, you have been selected from the long list of Doctors in your community. Your record, your personality, your knowledge, and the confidence you can invoke in patients have all been considered and passed upon by the jury of public opinion. Only when the verdict of that jury is consistently in your favor can you be a success in your field. In exactly the same way, an Insurance Company depends upon public opinion for its success. Its stability, its service, its integrity and its efficiency are all considered by the prospective policyholder.

For this reason, EMPLOYERS MUTUAL is very proud of its record of sweeping success . . . and of the thousands of policyholders who renew year after year without solicitation. A record of this kind should interest you. May we not send a representative to discuss your Automobile, Public Liability, Workmen's Compensation, Plate Glass, Residence Burglary, Fire and Tornado Insurance problems with you, and to give you proof of the fine record of EMPLOYERS MUTUAL? There is no obligation on your part in requesting this call. Phone or write us today.

EMPLOYERS MUTUAL  
LIABILITY INSURANCE CO.

*Employers  
Mutuals*

EMPLOYERS MUTUAL  
FIRE INSURANCE CO.

*Automobile, Public Liability, Workmen's Compensation  
Plate Glass, Burglary, Fire and Tornado Insurance*

HOME OFFICE: WAUSAU, WISCONSIN

WICHITA: 914 UNION NATIONAL BLDG.

*Branch Offices and Resident Representatives throughout the Middle West  
Consult Your Local Telephone Directory*



## SCIENTIFIC WORK

H. L. Chambers, M.D., Chairman.....Lawrence  
G. A. Finney, M.D.....Topeka  
Henry S. O'Donnell, M.D.....Ellsworth

## STORMONT MEDICAL LIBRARY

F. C. Taggart, M.D., Chairman .....Topeka  
D. A. Bitzer, M.D.....Washington  
L. M. Tomlinson, M.D.....Harveyville

## VENEREAL DISEASE

A. D. Gray, M.D., Chairman .....Topeka  
J. E. Henshall, M.D.....Osborne  
G. E. Kassebaum, M.D.....ElDorado  
O. W. Miner, M.D.....Garden City  
R. H. Riedel, M.D.....Topeka  
W. J. Singleton, M.D.....LaCrosse  
O. W. Davidson, M.D.....Kansas City  
Harold Neptune, M.D.....Salina

## COOPER OPINION

The following is the opinion in the case of State vs. Cooper handed down by the Kansas Supreme Court on May 7, 1938:

"The opinion of the court was delivered by

Wedell, J.: This was a suit on the relation of the attorney general to enjoin the alleged unlawful practice and the unlawful advertising of the practice of medicine and surgery. The injunction was allowed and the defendant appeals.

Defendant in substance admits: He had obtained no license to engage in the practice of medicine and surgery or any other branch of the healing arts; he advertised and held himself out to the public as one who treated and cured cancer; he received pay for his services. Defendant in substance contended: His treatment consisted in the application of a compound of certain drugs known only to himself which, if applied to a cancer in time, would kill cancer; he denied he had ever claimed to be a practicing physician as defined by the laws of this state, but insisted he was versed in the methods and ways of destroying cancer; that his treatment of cancer consisted in the application of a paste to a cancer itself and not to the human body and as a result of such treatment the cancer dies and the healing processes eject it from the body the same as any other foreign substance; the ingredients of his compound destroyed only abnormal tissue and had no effect on normal tissue; the remedy could be applied by anyone having access to the formula, it did not require the knowledge or professional services of a physician.

The defendant was eighty-six years of age and claims to have learned something of the cure of cancer from his father. For many years defendant sold Baker's medicines, household remedies. As a result of numerous inquiries and discussions with others concerning the treatment of cancer he finally prepared a compound of his own. It was in the form of a paste and was applied to the affected portion of the body. He conducted the practice in his home. In the front yard appeared a sign containing the following advertisement:

'CANCER HOME  
We Guarantee To  
KILL & REMOVE CANCERS

Or No Pay

Without Knife, Radium, X-Ray, or Electricity

W. W. Cooper

Among his advertisements was also the following:  
'Cancers.

Attention:

'Cancer is a very old disease. We can trace it almost as far back as we have knowledge of civilization. Familiar to the earliest physicians, it has persisted through the ages, and is baffling their efforts as effectively today as it did hundreds of years ago. And it is a fact there is no dangerous disease so easily cured as cancer, and none more dangerous if neglected too long or improperly treated.

'We guarantee to kill and remove them—or no pay. Over thirty years successful practice and no failures. Proof of success is success itself. Write and we will send you the proof.

W. W. Cooper, Mgr.

THE

CANCER HOME

ALTOONA, KANSAS.'

Other forms of advertisements were employed, including testimonials from patients. By reason of his age he had concluded to have his daughter and son-in-law assist him in his practice. Neither of them was licensed to practice any healing art. There was testimony to the effect that the defendant had moved from his former home and was contemplating converting that place into a cancer clinic, which was to be operated by his daughter and son-in-law, under his supervision. He had given them his formula and planned to oversee the work until they were as conversant therewith as he.

The law expressly enjoins the duty upon the secretary of the State Board of Registration and Examination for the practice of medicine and surgery to see that the act providing for such practice is enforced. (G. S. 1935, 65-1006.) One Raymond Tice, a student of medicine, was employed to obtain information concerning reported unlawful practices. Tice consulted the defendant concerning a pigmented nevus or mole under his arm, during September of 1936 and May of 1937. The substance of Tice's testimony was as follows: In the first consultation defendant advised him the mole constituted a cancer and was in a very bad place, but it could be cured; the fee was \$50; he paid \$3 at the time and defendant put some paste on adhesive tape and applied it to the mole; he was to return in about two weeks; immediately upon leaving defendant's residence the paste was removed; he returned in May of 1937, and a similar application was made; the fee was then reduced to \$25 and he paid \$5, and obtained a receipt therefor; upon leaving he again promptly removed the paste and it was examined by C. N. Watson, a chemist and bacteriologist at Independence, Kan.; the testimony of the defendant was to the effect that he was not certain whether Tice was afflicted with cancer, but that the paste would not be harmful in any event.

The testimony of Watson, in substance, was: That he made an analysis of the paste on the adhesive tape, both quantitative and qualitative, and the analysis showed that the paste contained about fifty per cent chloride of zinc, starch and some vegetable tissue,

# Grandview Sanitarium

KANSAS CITY, KANSAS. (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of super accommodations for the care of:

NERVOUS DISEASES

MILD PSYCHOSES

THE DRUG HABIT

AND INEBRIETY.

Situated on a 20-acre tract adjoining City Park of 100 acres. Room with private bath can be provided.

The City Park line of the Metropolitan Railway passes within one block of the Sanitarium. Management strictly ethical.

Telephone: Drexel 0019

SEND FOR BOOKLET

**E. F. DeVILBISS, M.D., SUPT.**

OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.

## Behind MERCUROCHROME

(dibrom-oxymmercuri-fluorescein-sodium)



*is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

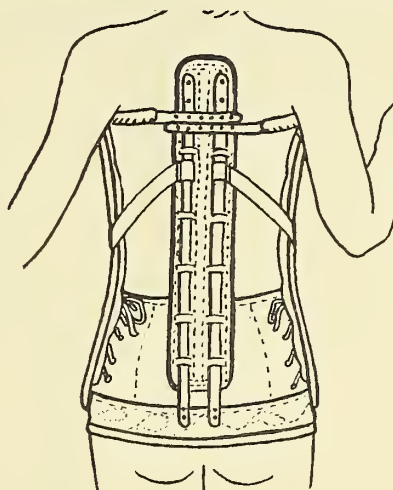
Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

**Hynson, Westcott & Dunning, Inc.**  
BALTIMORE, MARYLAND

## A COMPLETE SERVICE



We make all types of braces, splints, belts, elastic hose, crutches, arch supports and special apparatus.

If your patients cannot come to us we will come to them. Prices reasonable.

**Camp's Supports**

**Kansas City Brace & Splint Co.**

Phone Drexel 0640

847 Minnesota Avenue

Kansas City, Kansas



indicating it was mucilaginous drug called althaea, the exact proportions of the compound being thirty-two per cent water and fifty per cent chloride of zinc and starch which had been caramelized, making up the balance; he was familiar with the chemical properties of zinc chloride and that it was a caustic which would burn or eat animal tissue; as a chemist he was familiar with pastes or compounds containing similar formulae as that disclosed by the analysis; those formulae are given in the national dispensary and United States dispensary used by the medical profession; the compound used by the defendant was similar to that of Canquoin's paste used as a caustic in the treatment of cancer.

The testimony of the defendant was to the effect he always used the same paste and that its active ingredient on the cancerous tissue was zinc chloride.

The pertinent testimony of Dr. J. G. Hughbanks, a witness for the state, was in substance as follows: he was acquainted with and had an opinion concerning the effect of an application of paste composed of thirty per cent water, fifty per cent zinc chloride, flour, starch and althaea; when applied to tissue of the human body, the effect of such application was to destroy all tissue with which it came in contact. The only one of the ingredients which had that reaction was zinc chloride. It is an escharotic or caustic and will destroy normal tissue as well as abnormal tissue. Zinc chloride was first used in the treatment of cancer by a Frenchman named Canquoin over a hundred years ago. The treatment of external cancer by zinc chloride is used to a limited extent among the medical profession at this time. Some dermatologists use it with a great deal of caution. It can only be used by men who have an appreciation of the danger of the drug. The reason for the caution is that the caustic leaves extensive scars and may cause clots to form in the blood stream during treatment, causing a pulmonary embolus. The preparation is certainly not what is termed a 'home remedy.' It is not used extensively by the medical profession because of its known dangers, and better results can be obtained with x-ray or knife and with less danger. It is impossible to distinguish different types of cancer from a benign growth by superficial examination.

The statute defining the practice of medicine and surgery does not prohibit the administration of domestic medicines or gratuitous services. (G. S. 1935, 65-1005.) The trial court found defendant's compound was not a home remedy; his services were not gratuitous, he had obtained no license for the practice of medicine and surgery, and that his practice was unlawful.

Much of defendant's argument is directed against the wisdom of the law which prohibits his practice without a license. With that contention courts, of course, cannot be concerned. That is a prerogative of the legislative and not of the judicial branch of government.

Defendant urges he was not engaged in the practice of medicine or surgery. The answer must be found in the interpretation of the statute. The statute defining that practice is G. S. 1935, 65-1005. The pertinent portion thereof reads:

'Any person shall be regarded as practicing medicine and surgery within the meaning of this act who shall prescribe, or who shall recommend for a fee, for like use, *any drug or medicine*, or perform any

surgical operation of whatsoever nature for the *cure or relief* of any wounds, fracture or bodily injury, *infirmary or disease of another person*, . . . or any person *attempting to treat the sick or others afflicted with bodily or mental infirmities*, or any person *representing or advertising himself by any means or through any medium whatsoever or in any manner whatsoever*, so as to indicate that he is authorized to or does practice medicine or surgery in this state, or that he is authorized to or does treat the sick or others afflicted with bodily infirmities, . . . ' (Italics inserted.)

G. S. 1935, 65-1006, prescribes the penalties for engaging in the practice without first obtaining a license to do so. It is true the record discloses defendant treated many patients without charging a fee in the event of their inability to pay. It also discloses defendant's frank admission he charged for his services and based his fee on ability of the patient to pay. It cannot be doubted the practice in which he engaged, without a license, was clearly prohibited. There was strong evidence to support the specific finding of the trial court that the compound used was not a home remedy. (For a discussion of what constitutes home remedies, see *State v. Huff*, 75 Kan. 585, 592-598, 90 Pac. 279.) Where the evidence concerning a specific finding is conflicting this court does not weigh the evidence or pass upon the credibility of witnesses. That is solely the province of the trial court. In such cases this court examines the record only for the purpose of ascertaining whether there is substantial evidence to support the findings made, and not whether there is evidence to the contrary. (*Settle v. Glenn*, ante, page 502, 503, ..... P. 2d .....) Moreover, the evidence of the defendant, when properly analyzed, was not that his compound constituted a home remedy. His evidence was quite to the contrary. It was to the effect that it could be applied by anyone without danger who had access thereto. He contended, however, it was a combination of drugs known only to himself. For this knowledge, claimed to be possessed solely by himself, and for the treatment of the patient he charged a fee. In *State v. Huff*, *supra*, it was held:

'An allegation that a defendant "did . . . prescribe and recommend for a fee drugs and medicines for the cure and relief of bodily infirmity and disease of another person" is supported by evidence that he treated a person, who was afflicted with what he pronounced to be a cancer, by the external application of a substance which he represented as being a remedy therefor, under a contract that he should receive fifty dollars down and fifty more when a cure was effected.' (Syl. ¶ 4.)

'In a prosecution under a statute making it a misdemeanor for one not having a certificate of qualification from a state board to practice medicine, and providing that "any person shall be regarded as practicing medicine . . . who shall prescribe, or who shall recommend for a fee, for like use, any drug or medicine," but that the act shall not apply to "the administration of domestic medicines" (Gen. Stat. 1901, § 6674), where the defendant is charged with recommending a medicine for a fee it is not material to inquire whether the medicine alleged to have been so recommended was a domestic medicine within the meaning of the phrase as used in the act; the fact that it was a domestic medicine would not constitute a defense.' (Syl. ¶ 5.)



## Cosmetics and Your Patient's Morale



THE DOCTOR IS OF NECESSITY A STUDENT OF LIFE. Each new patient presents a new study, a new problem. Psychology plays an important role in the course of treatment he prescribes. With some patients he must be frank to a point of harshness, with others he must be gentle and coaxing. The nature of the illness and, more particularly, the nature of the patient determine his attitude. He knows from experience the value of bolstering his patient's morale. As a student of psychology he knows that few things are more depressing to a woman than the fear that she is losing her charm; that when she no longer cares how she looks the chances are she has lost touch with a vital interest in life. And because he appreciates the importance of a sensible interest in personal appearance he quite rightly encourages his patients to look their best at all times. FINE COSMETICS appeal to that interest. That is why they deserve to be recommended by doctors who are, after all, greatly concerned with their patient's morale.

---

**LUZIER'S, INC., MAKERS OF FINE COSMETICS & PERFUMES**

---

KANSAS CITY, MO.



For other cases which discuss the application of G. S. 1935, 65-1005, to various practices of the healing arts and advertisements concerning such practices, see, also, *State v. Johnson*, 84 Kan. 411, 114 Pac. 390; *State v. Peters*, 87 Kan. 265, 123 Pac. 751; *State v. Douglas*, 124 Kan. 482, 260 Pac. 655; *Slocum v. City of Fredonia*, 134 Kan. 853, 8 P. 2d 332.

Defendant suggests that the prohibiting of the practice as conducted by him violates his inalienable rights and the fourteenth amendment to the federal constitution. No authorities are cited in support of the contention. The law does not prohibit the practice of medicine and surgery. It simply prescribes certain requirements with which defendant and others must comply in order to qualify for the practice. That the legislature, speaking for the people, has power to prescribe reasonable restrictions and qualifications touching the practice of the healing arts in any of its departments, without violating any constitutional rights, is clear. Such legislation constitutes a valid exercise of police power. (*State v. Creditor*, 44 Kan. 565, 24 Pac. 346; *State v. Wilcox*, 64 Kan. 789, 68 Pac. 634; *Meffert v. Medical Board*, 66 Kan. 710, 72 Pac. 247; *State v. Johnson*, 84 Kan. 411, 413, 114 Pac. 390.) The fourteenth amendment to the federal constitution does not affect valid police regulations enacted by the states. (*Mugler v. Kansas*, 123 U. S. 623, 8 S. Ct. 273, 31 L. Ed. 205; *Johnson v. Reno County Comm'rs*, 147 Kan. 211, 216, 75 P. 2d 849.)

Defendant urges the state has a remedy at law under its criminal statute (G. S. 1935, 65-1006), and hence it will not be permitted to resort to the equitable remedy of injunction. It is true that ordinarily equity does not enjoin the commission of crime. The legislature, however, in order to more adequately protect the health and welfare of its citizens, saw fit to make effective the regulation and control of the practice of medicine and surgery by enlarging existing remedies. It therefore provided the preventive measures of injunction and quo warranto. It expressly declared those remedies should constitute additional remedies to the existing remedy of criminal prosecution and that they were not provided in lieu thereof. (Laws 1937, ch. 270.) No valid reason is advanced and no authorities are cited holding the legislature is without power or authority to provide such additional remedies. The remedy of injunction was recognized in this state in a suit to prevent the operation of a retreat for the insane or persons of unsound mind, although its operation without a license constituted a misdemeanor and there was no express statutory authorization to proceed by injunction. (*State v. Lindsay*, 85 Kan. 79, 116 Pac. 207.) It was there said:

'It has often been broadly stated that an injunction will not lie to prevent the commission of a crime or penal offense, but this is subject to important qualifications. The remedy has been upheld in some situations where the act enjoined was criminal. . . .

'Courts of equity are reluctant to use the process of injunction where the remedy by indictment or information is efficacious, but will not hesitate where the remedy is not adequate and it is necessary to protect the rights of the public or an individual. A court is not powerless to prevent the doing of an act merely because it is denounced as a public offense. (*In re Debs Petitioner*, 158 U. S. 564; *The North American Ins. Co. v. Yates*, 116 Ill. App. 217; *The Columbian Athletic Club v. State, ex rel. McMahan*, 143 Ind. 98; *Commonwealth v. McGovern*, 25 Ky. Law Rep. 411;

*State, ex rel., v. Canty*, 207 Mo. 439.) A related subject is considered in *The State v. Snelling*, 71 Kan. 499.' (p. 83.)

In 14 R. C. L. Injunctions, section 81, the rule is stated thus:

'It is also competent for the state, within the constitutional limits of its legislative powers, to declare any act criminal, and make the repetition or continuance thereof a public nuisance, so as to enable the courts, on conviction, to pronounce judgments of abatement, or to vest in courts of equity the power to abate them by injunction.' (p. 380.)

This court has recognized the fact there is a wide difference of views as to the use of injunction where the violation of law is made a criminal offense and where no express authorization by injunction is provided. (*State, ex rel., v. Basham*, 146 Kan. 181, 70 P. 2d 24.) It seems clear, however, that a statute which expressly makes available to the state the remedy of injunction for the protection of the public health, is not invalid on constitutional grounds merely because the violator of a statute is also amenable to criminal prosecution. Such a statute is not invalid as authorizing an injunction against an act made criminal or as denying the right to a jury trial in criminal prosecutions. Punishment for violation of such injunction would be for contempt of the order of injunction and not punishment for violation of a criminal statute. These principles have been clearly recognized in cases of injunction under medical practice acts and similar legislation. (*Bd. of Medical Examiners v. Blair*, 57 Utah 516, 196 Pac. 221; *State v. Smith* 43 Ariz. 131, 29 P. 2d 718; *McMillan v. Sanitary Bd.*, 119 Miss. 500, 81 So. 169; *P. S. C. of Wyo. v. Grimshaw*, 49 Wyo. 158, 53 P. 2d 1; *Iticaina v. Marble*, 56 Nev. 420, 55 P. 2d 625; 32 C. J. Injunctions, §§ 438, 442; 5 A. L. R. 1474, Anno.)

Defendant insists he has not had his day in court. The contention is not well taken. It is based upon the refusal of the trial court to hear the testimony of numerous witnesses. No proper showing is made concerning the nature and substance of their testimony had they been permitted to testify. The alleged error is therefore not properly presented for review. (*Walker v. S. H. Kress & Co.*, ante, page 48. 56, 75 P. 2d 820.) We are told the witnesses would have testified concerning the benefits derived from defendant's treatments. The question at issue was not how much benefit or harm had resulted from defendant's treatments. The question was whether he was authorized to do what he had done and what he intended to continue to do, without a license. Defendant's own admissions disclosed his practice was not within the law and the testimony of his friends could not have altered that fact.

It is also urged the trial court abused its discretion, improperly joined in the argument of counsel, made injudicial remarks and displayed prejudice against the defendant. In view of the seriousness of such charges we have not relied merely upon the abstracts, but have carefully analyzed the transcript. The record discloses the trial court exercised exceptional patience throughout the trial, asked only questions which facilitated the trial, and that he was particularly courteous to the defendant in every possible way. The complaints are utterly devoid of merit.

It is also urged the treatment of cancer should not have been enjoined because the term "cancer" is not specifically mentioned in the medical practice act. The

## REPRINT PRICE LIST

Reprints from articles in the  
**KANSAS MEDICAL JOURNAL**

All Reprints are made the same size as  
Journal pages,  $7\frac{3}{4} \times 10\frac{1}{2}$  inches.

Transportation charges on reprints are  
to be paid by the Author

No. Copies	Pages	Without Cover	With Cover
100.....	4	\$ 9.00	\$12.25
250.....	4	9.75	14.50
500.....	4	11.00	17.50
1000.....	4	18.00	26.00

No. Copies	Pages	Without Cover	With Cover
100.....	8	\$12.50	\$16.00
250.....	8	14.00	18.00
500.....	8	16.00	23.00
1000.....	8	21.00	32.00

No. Copies	Pages	Without Cover	With Cover
100.....	12	\$16.00	\$20.50
250.....	12	18.25	23.50
500.....	12	21.25	28.25
1000.....	12	28.00	39.00

### CAPPER PRINTING CO.

Capper Building,  
TOPEKA, KANSAS

## Ambulance Service

To which you may  
trust your most  
gravely ill patient

•

NEW AMBULANCES  
TWO TRAINED ATTENDANTS

•

Rates: 15c a mile to any point in Kansas—  
everything included

WALL-DIFFENDERFER  
MORTUARY

Topeka,  
Kansas.

723 West 6th  
Phone 3-2326



## EXERCISE

### FOR BOWEL REGULATION

The patient who is unable to exercise or adhere to a suitable diet will appreciate the aid of Petrolagar to maintain a regular bowel movement. Petrolagar softens hard stools and assists the bowel to function normally. Its pleasant flavor, devoid of the oily taste associated with plain mineral oil, makes Petrolagar very easy to take. Prescribe Petrolagar for bowel management, it's "Council Accepted." Petrolagar Laboratories, Inc. • Chicago, Ill.

Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.





contention scarcely merits mention. The statute did not attempt to particularize ailments or diseases which it was designed to embrace. It was intended to be and is general in its terms.

It is finally urged defendant's motion to strike the testimony of the witness, Tice, who made the investigation, should have been sustained for the reason he was acting as a decoy and that his statements were untrue. It is not contended the trial court did not carefully scrutinize and consider the testimony of the witness. The credibility of the witness and the weight of his testimony were proper subjects for the consideration of the trial court, but not for this court.

We have examined such cases as defendant has cited, but they are not authority for any contention made here.

The judgment is affirmed.

Attorneys in this case were as follows: for the state Mr. Theo. Varner, Assistant Attorney General; for the defendant Mr. C. C. McCullough of Emporia, Kansas.

## The Mary E. Pogue School

Established 1903

*for exceptional children*

Individual instruction for backward and problem children of any age. Separate building for boys. Epileptics accepted. G. H. Marquardt, medical director. W. H. Holmes, consultant. Gerard N. Krost, pediatrician.

**Wheaton, Ill. Phone—Wheaton 66**

40 Geneva Road

## ATTENTION AUXILIARY MEMBERS

Due to the length of the Kansas Supreme Court Opinion and the Cooper Opinion contained in this issue, the Journal staff was forced to omit the Auxiliary section for this month. We will, however, include the news for this month and next in the July issue.

## PROFESSIONAL PROTECTION



### A DOCTOR SAYS:

"I deeply appreciate the protection afforded by your company and the wholeheartedness with which you went to battle for me."

THE

## MEDICAL PROTECTIVE COMPANY

OF FORT WAYNE, INDIANA

**WHEATON, ILLINOIS**

## THE TROWBRIDGE TRAINING SCHOOL

Established 1917

A HOME SCHOOL for NERVOUS and BACKWARD CHILDREN

**The Best in the West**

Beautiful Buildings and Spacious Grounds. Equipment Unexcelled. Experienced Teachers. Personal Supervision given each Pupil. Resident Physician. Enrollment Limited. Endorsed by Physicians and Educators. Pamphlet upon Request.

1850 Bryant Building

**E. HAYDEN TROWBRIDGE, M.D.**

**Kansas City, Mo.**

## WOODCROFT HOSPITAL



### PUEBLO, COLORADO

Founded 1896 by Dr. Hubert Work

A modern, newly constructed sanitarium for the scientific care and treatment of those nervously and mentally ill, the senile and drug addicts.

**CRUM EPLER, M.D.**  
Superintendent

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

JULY, 1938

Number 7

## HEMIPLEGIA\*

### SOME OF ITS PATHOLOGIC AND CLINICAL FEATURES

Louis J. Karnosh, M. D.

Cleveland, Ohio

The main clinical features of hemiplegia are familiar to all of us and to many a practitioner it constitutes the closing scene in a large proportion of his aging patients. In early medical history, apoplexy was a subject which appealed to men of letters as well as to physicians. A massive literature is full of meticulous detail and learned discussions. In 1658 four autopsies studied by Wepfer settled forever the relationship between apoplexy and cerebral hemorrhage. It did not, however, determine the exact mechanism of the hemorrhage and the subject was then, as it is now, one for discussion and dispute. In 1859, William Gull (the self-same Gull who gave us myxedema) first demonstrated the rupture of a tiny aneurysm in the brain. In 1868 came Charcot and Bouchard with their seventy-seven consecutive cases in which they believed they found miliary aneurysms as the cause of bleeding in every instance.

For twenty years the world took Charcot at his word and hemorrhage through a minute aneurysm was accepted as the only cause of a hemiplegia. Hence, attention was focused upon these tiny swellings along the arteries of the senile brain. Eppinger and Pick focused the microscope upon these formations; they found them to consist of swollen arterial walls with the inner coat thickened, filled with hyalin material and with the all-important middle or muscular layer replaced by fibrous tissue. In fatal hemorrhages these degenerated areas were often suffused with blood but rarely was there an open break to explain the massive bleeding. Moreover, this blood clot was often found to be limited by a thin membrane instead of seeping in an irregular fashion into the nerve tissue.

Some of these puzzling features were studied by Rosenblath in 1918. He concluded that long before hemorrhage takes place a small area of degeneration appears opposite the arterial plaque. When the blood finally escapes from the artery it fills this area, stretches its membrane to the fullest extent and produces a mass which is smooth in outline and injures adjoining brain tissue chiefly by compression.

Because hemorrhage produces such a striking clinical picture, it is diagnosed *intra vitam* more frequently than is justifiable. As a matter of fact, it is much less common than cerebral infarction or softening. In this respect our own figures at Cleveland City Hospital are misleading, for, in 188 cases of hemiplegia studies at autopsy, 126 were called bleeding and only sixty-two were recognized as cerebral softening.

Cerebral softening is just another of nature's methods of announcing advanced vascular disease. Here again hyalin degeneration and thickening of the inner coat is the basic trouble, but the swelling occurs at the expense of the lumen. This becomes much narrowed and under certain conditions there may be inadequate blood carried to a given portion of the brain. Long before the artery becomes entirely occluded, it may forewarn the patient of this eventuality by causing ischemic attacks. Thus, after a heavy meal or out of the hours of deep sleep when general blood pressure is below par, there may develop a moderate hemiplegia, a temporary aphasia or mental confusion. Such a transient attack may disappear only to recur with the same features at irregular intervals. Sooner or later, however, total occlusion by thrombosis occurs and the hemiplegia now becomes serious and permanent, for we now have a true infarction, an area of softening in that portion of the brain fed by the offending artery. The pathology is that of anemic infarction and the appearance is that of spongy degeneration with new capillary formation and an accumulation of various reactive cells.

\*Presented before the 79th Annual Session of The Kansas Medical Society in Wichita May 9-12, 1938.



Along with cerebral arteriosclerosis as a cause of hemiplegia and having the same fundamental effect upon the brain is syphilis. However, it is much rarer, only seventeen per cent of the series presented here being due to this disease. Again the trouble is essentially arterial. The smaller vessels are involved as pointed out by Huebner. There is an intense inflammation of all three coats of the artery—a panarteritis so to speak—particularly an extreme swelling and hyperplasia of the inner layer resulting in a narrowed lumen. Thrombosis occurs; the lumen is plugged. Fortunately in the average case the patient is relatively younger and prompt treatment may salvage the arterial circulation.

A third type of blood vessel disease which may cause a hemiplegia is the true aneurysm. This is now believed to be a congenital defect. While it causes greatest havoc in the large vessels at the base of the brain and kills by massive hemorrhage into the spinal fluid, it is occasionally found in the substance of the brain tissue. The hemorrhage is extensive and frequently the arterial flow of blood excavates a channel through the delicate nerve tissue to eventually break through into the ventricles. Only four cases were found in the series presented here. Diagnosis was made largely by exclusion for in every instance the onset was sudden, the course malignant and brief and all four patients were under thirty with no signs of general arterial disease or syphilis.

Whether the lesion in the brain be hemorrhage, softening, syphilitic thrombosis or true aneurysm, hemiplegia is the most dramatic symptom. This implies that the middle cerebral circulation is most commonly subject to such disasters.

Out of 196 autopsies, seventy-two and one-half per cent of the hemorrhages found in the brain were in the middle cerebral circulation. Fifty-one patients or sixty-seven per cent of all cases of cerebral softening were in the same middle circulation. Ironically enough it is this circulation which nourishes the brain areas which are responsible for voluntary activity of the hand and for the complex functions incidental to language.

Sectioning the brain through this vulnerable area will further localize the specific area which is most susceptible. Contrary to general opinion it is not the internal capsule. The vast proportion of autopsies on hemiplegia reveal the lesion to be situated in the lower portion of the corona radiata near the putamen. Various workers explain this predilection for this site because it represents a cleavage zone where there is the least collateral circulation.

No one hemisphere is more prone to hemiplegic disease than the other, although the old literature

reports a majority of lesions in the right brain. In this group fifty-three per cent of the hemorrhages and fifty-four per cent of the softening were in this hemisphere—only a slight preponderance of right sided lesions.

What may be the immediate provocation for an attack of apoplexy? This matter is obviously of great prophylactic importance. Only in sixty-three cases were we able to get reliable data as to what occupied our patients at the moment of attack. Eighteen were at manual labor, twelve were on the street, three were drunk, one was fighting and one was in a fit of anger—all these activities were not surprisingly incompatible with stroke. But in another group, one was in the act of eating and two had just consumed an average meal. Finally, a rather high proportion were relatively inert when they were stricken—sixteen were sound asleep, seven resting and two had just retired to bed.

High blood pressure is not necessarily a pre-requisite to stroke. It does however cause hemorrhage rather than softening. The average blood pressure in our cases of fatal hemorrhage was 177/104. A low blood pressure may be equally dangerous in the aged person for it is associated with ischemia, thrombosis and softening. In this latter lesion the average blood pressure was 157/95.

There are a few other rarer lesions in the human brain which may cause hemiplegia. Obviously head injury must be included. A laceration of brain tissue by bone or foreign body may cause it. More subtle than this is a remote effect from trauma, notably sub-dural hematoma. This is the slow accumulation of a blood clot in the subdural space. It may cause hemiplegia and progressive stupor long after the trauma, which may be trivial, is forgotten. Such a tumor caused progressive hemiplegia sixteen months after a patient had struck his head lightly against an auto jack in the back seat of his car.

Finally, a cause of hemiplegia may be brain tumor. Ordinarily the paralysis develops slowly. There may be Jacksonian convulsions on the same side and evidences of increased pressure within the skull are detected early enough to clarify the diagnosis. One tumor, however, is treacherous in its manifestations, so that it may produce a stroke exactly like that of hemorrhage and in fact there is generally a true hemorrhage found in the substance of the tumor itself. This neoplasm is known by the awesome name of Glioblastoma multiformis. It is likely to appear in midlife and later and therefore the age incidence falls in with that of true apoplexy. Moreover, it grows so rapidly into the white matter, shows no signs of pressure until it causes bleeding and hemiplegia. Its differential diagnosis haunts every neu-

rologist and every neurologist with experience can recall a humiliating experience with this imposter.

Let us now leave the pathology of hemiplegia and look upon the clinical picture. Immediately after any acute and severe stroke, the side affected is generally in shock. This means that the arm and leg are flaccid, toneless, and all tendon reflexes are absent. Neither extremity can be moved voluntarily. The face, however, does not conform to this picture of hemi-paralysis. The eye movements in all directions are intact. It will be noted usually that facial movements about the eyes are retained on the side affected, and only when the patient is asked to retract his lips to show his teeth is there a weakness manifested. The tongue protrudes to the paralyzed side, and the pharynx is drawn over to the good side.

Unless the pathology is well known, no one can make an accurate prognosis in a patient who is in acute hemiplegic tonelessness or shock. It may clear up quickly as it does in ischemic attacks or as it often does in syphilis.

But where brain damage is permanent the orthodox picture of spastic hemiplegia soon emerges from the stage of shock. In a matter of two or three weeks an abnormal tonus appears in the arm and leg and the typical text-book hemiplegia slowly emerges.

It is this chronic condition of hemiplegia which intrigues the nerve specialist for it affords him an opportunity to study certain movements and reactions which are called release phenomena, that is, activities which are due to centers below the brain proper, activities which arise from more primitive centers such as the brain stem and spinal cord.

In this sense hemiplegia is strictly speaking not an absolute paralysis of one-half of the body:

Let us first look at the face of a chronic hemiplegiac. As noted before movements of both eyes in all directions are normal, raising the brows, winking, scowling and closing the eyes are acts readily performed on command. But when the patient is asked to grimace and expose the teeth the affected side is weak. However, tickle the patient, tell him a funny story or stick him with a pin and immediately the paralyzed side of the mouth will spontaneously open wide. This is an emotional response and can only mean that emotional stimuli of pain or pleasure come from a lower center of the brain—possibly the thalamus. If in a brain hemorrhage the thalamus as well as the internal capsule is injured, this emotional response is also absent.

We now observe the respiratory activity of the chest in hemiplegia. With few exceptions there is no asymmetry. During normal regular breathing costal activity is equal on both sides. In some cases only in enforced voluntary respiration, one may note a

slight lag on the paralyzed side. From this we are led to conclude that breathing like the emotions are a function of the brain stem.

The arm and hand of a chronic hemiplegia is its most striking component. It has a peculiar fixed posture first described by Wernicke and Mann. There is adduction at the shoulder, flexion at the elbow, semi-pronation of the forearm, flexion at the wrist and flexion of fingers. If one attempts to break this standardized rigidity of hemiplegia, one meets with tonic resistance, the patient cries out with pain and on releasing one's hold the arm immediately returns to this posture in the manner of a watch spring.

Why is this posture so universal in spastic hemiplegia? Russell Brain answers this by saying it is identical with the resting position of the forelimbs of anthropoid apes and monkeys. A dog begging or a bear in the erect position show a similar pose. Hence it represents a reversion to a more primitive nervous control of the fore limb.

Can it be modified by other means than pulling it away from the body? It can in certain cases. If a patient with spastic hemiplegia is asked to get down on "all fours" this spastic arm may suddenly and of its own accord straighten out, that is, the elbow extends but the hand and the fingers remain flexed and the patient rests his weight upon the knuckles of his fingers. This is known as the "quadrupedal extensor reflex" and seems to prove that the four-legged gait of animals is a simple brain-stem performance. Let me add that when the patient is subjected to this test he is much more amazed at the automatic extension of his arm than is the demonstrator.

Again if the patient yawns violently the spastic hand may show an extension and separation of the fingers. Thirdly, if one asks the patient to firmly squeeze the examiner's hand with his own good hand, there will be a slight opening of the impaired hand and a definite extension of the spastic elbow. There are many other so-called "tonic reflexes" which reveal what interesting phenomena are concealed in the darker recesses of the brain stem but the above examples will suffice for this discussion.

The hand itself is a scoop-like appendage with a flattened palm and with the thumb pulled away from its prehensile position and "laid away" to the side. Prehension is totally absent for it is a refined function of the higher brain. It is well to show by contrast the hand of Parkinsonism which is everything that the hemiplegic hand is not. The normal resting hand appears to be a compromise between these two postures.

The lower limb of spastic hemiplegia, unlike the arm, is rigidly extended. There is some adduction at



the hip, the foot is moderately extended and inverted with the toes pointing down and in.

It must be pointed out that the incurable hemiplegiac can generally walk. The lower limb is not dominated very much by the higher brain and after the shock of hemiplegia, the leg generally regains some voluntary movement. This should not be construed as a sign of early recovery of the hand and face. Moreover, much of the leg area in the brain is supplied by the anterior cerebral artery and this vessel is not very frequently the site of apoplexy. Do not use recovery of leg function as a criterion of recovery for the arm and face.

Occasionally a hemiplegia remains flaccid and never takes on the spastic pose. There is raging at present a warm controversy over the cause of chronic toneless hemiplegia. If you have such a case, look also for a sensory defect over the paralyzed side of the body for the latest theory is that the thalamus is involved in such cases as well as the internal capsule. We found this theory confirmed in six cases of toneless hemiplegia.

One other feature of hemiplegia is worth discussing in this recital of its unique features. Occasionally a patient may be incompletely recovered from a stroke on the right side and suddenly suffer an attack on the other side. This means that he has a double hemiplegia. Neither side may be completely impaired but in double paralysis almost always we have the symptom known as pseudo-bulbar palsy. In such a state the patient is unable voluntarily to speak, protrude the tongue, chew or even swallow. If food is injected into the pharynx, however, there is a vigorous reflex swallowing. The gag reflex is over-active. Most dramatic is the patients' inability to control his emotions which literally run away with him. With little or no provocation and with no natural inner feelings associated with it the patient is seized with compulsive outburst of crying or laughing which may continue for long periods and about which the patient can do nothing to his great humiliation. Here again we have a demonstration of the fact that the primal emotions have their seat in the lower levels of the brain.

As in other things, treatment of hemiplegia depends entirely on an adequate diagnosis of the exciting lesion. In those cases, in which the diagnosis is doubtful or rests between hemorrhage and softening, to do nothing is better than to do too much.

It is therefore of prime importance to determine whether a stroke is due to bleeding or plugging of an artery. In hemorrhage the onset is more sudden and is attended with more shock; the neck may be rigid; stupor is more profound and generally there is an acute rise in temperature to a sharp peak, to be

followed by a rapid fall to normal. There is no great degree of leucocytosis; it is useless to take blood pressure with an idea of determining if hypertension exists, for in all instances after an apoplexy the pressure is low. In thrombosis the onset is more gradual, stupor is minimal, there is a gradual rise in temperature which may fluctuate between normal and thirty-eight degrees C. for several weeks. Leucocytosis is marked.

The patient seized with a stroke as a result of hemorrhage should be placed in bed with head high and feet low. Ice caps should be applied to the head, hot water bottles to the feet. It is worth while, as an emergency measure, to give autohemic treatment, that is, to reinject into the gluteal muscles, twenty-five cc. of the patients own venous blood. Movement of any kind is prohibited and to allay restlessness, morphine sulphate is the drug of choice. Catheterization may be necessary twice a day for a few days, the back must be kept dry and scrupulously clean to avoid "acute bedsores". The patient's position must be frequently changed to prevent hypostatic pneumonia and it is best to keep the patient lying on the opposite, healthy side to facilitate respiration and to prevent pressure damage to the paralyzed limbs. Purgatives are useful for splanchnic congestion. Cold milk for the first three days will suffice to maintain metabolism. If unable to swallow, a mixture of clear soup and milk can be introduced once a day by stomach tube. Avoid allowing these patients out of bed even though improvement occurs before the sixth week. They should be chair ridden for another two weeks and walking should not be attempted until a chronic picture of spastic hemiplegia is well established. Massage to the palsied limbs has no rational value, but its psychological benefits justify its prolonged application.

Thrombosis is more kindly to its victim in that it generally furnishes warnings in the form of ischemic attacks. There may be a slight loss of memory, a transient aphasia or a slight weakness in the arm or leg several days or hours before complete softening has developed. All this means a failing circulation in a given portion of the brain. Hence treatment should be quickly pursued in the direction of stimulating the circulation whether the vascular defect be arteriosclerotic or syphilitic. Hence we must endeavor to stimulate the heart, raise the blood pressure so as to discourage coagulation. Two tablespoonfuls of brandy or whisky and ammonia to the nostrils are useful emergency measures. The head should be lowered and the feet elevated. A hot water bottle to the precordial region is regarded by some as of special importance. Cathartics must be strictly avoided. Here digitalis is accepted as a indispensable cardiac tonic

and can be given along with small doses (1/100 gr.) of nitroglycerin.

In syphilitic thrombosis, after the above emergency treatment, specific antiluetic therapy is obviously indicated. Syphilitic thrombosis is likely to offer a happier prognosis than the softening of old age, for it occurs in younger people and apparently the blood vessel occlusion is not so complete. Frequently even before salvarsan is started, the patient's hemiplegia begins to resolve. If this does not occur in three or four days time, irreparable injury has occurred and antiluetic therapy, no matter how vigorously pursued, can not be expected to promote recovery although it may do a great deal in preventing occlusions in other vessels. Mercury, iodides and bismuth should be given in routine doses along with salvarsan. Tryparsamide should be avoided and is not necessary unless paretic symptoms are also in evidence.

Hemiplegia due to subdural hematoma is capable of recovery if trephining and aspiration of the blood clot is done in good time. Only in very elderly persons is this procedure likely to be fatal or where the hematoma has caused pressure of long standing.

Where paralysis is due to brain tumor, the treatment lies entirely in the province of the brain surgeon. Tumors causing hemiplegia are likely to be deep seated and surgically inaccessible, but one should always gamble on the chance of the neoplasm being a meningioma or an extra-cerebral growth. Even where a hopelessly infiltrating tumor exists, the daring neurosurgeon has extirpated large portions of the brain and in recent years several cases have survived a total resection of the right hemisphere. This operation makes a hemiplegia permanent and complete, but spares the patient from the dementia and blindness of expanding growth.

### CONCLUSION

The common lesions responsible for hemiplegia have been presented. The orthodox picture of the common stroke is described with some of the more evasive and automatic functions in man which are released into overt activity when higher brain centers have been damaged. These more detailed studies have added much to our neurologic lore.

---

The Old Clinician says: "It is as futile for a physician to attempt to base a diagnosis on a single symptom as for an architect to attempt to determine the appearance of a house by seeing one of the stones which has been removed from its walls."—Hare.

---

Every man owes some of his time to the advancement of his profession.—Theodore Roosevelt.

## POST-PARTUM CARE OF THE CERVIX WITH SPECIAL REFERENCE TO CARCINOMA PROPHYLAXIS

Ray A. West, M.D.

Wichita, Kansas

In the past two or three decades, a very great amount of research, as well as clinical work has been carried out on the subject of carcinoma of the cervix. No doubt much has been added to the sum total of our knowledge on the subject, and in a practical way there has been some lowering in the mortality rate of this most disastrous disease. Yet, when we consider that the very best result that any clinic is able to show is only slightly under thirty-three per cent for a five year cure, a very dreary outlook is presented to a patient suffering from carcinoma of the cervix; especially when we consider the fact that after all, a five year cure does not mean a six, seven, or eight year cure. Many patients die ten or fifteen years after a so called five year cure. Lynch<sup>1</sup> reported six out of a series of fifty cases who died from six to fourteen years after supposedly being cured.

Now with this discouraging picture in mind, it would seem that this problem should be approached from a different angle. It will be necessary to learn and remember more about the anatomy, physiology, and pathology of the cervix and apply this knowledge in prevention as well as cure. The fact that infection and chronic irritation is probably the one most important etiologic factor in production of cancer in all parts of the body is quite well agreed upon by investigators<sup>2,3</sup>. They also believe that this is probably more true in cancer of the cervix than in any other part of the body. So with these facts in mind it is readily seen that any prophylactic measure must be directed in eradicating these chronic infections of the cervix. There is no doubt that this innocuous appearing little organ is being neglected and overlooked in a most shameful manner by the average doctor. It must be realized that the cervix uteri is something more than a simple opening into a larger and more important uterus above. A little scientific thought will make one realize that this organ must have been designed to act as a barrier against invasion by pathogenic organisms of the higher and more delicate structures of the reproductive tract<sup>3</sup>. This mission it accomplishes very successfully in its normal state, although in doing so it must of necessity be subjected to rather severe bacterial shocks and traumatisms. In the abnormal state, due to injury,



however, its defense mechanism is markedly impaired.

It is the purpose of this paper to present a routine of care based on rational anatomical, physiological and pathological facts which should permit every doctor to conduct his own cancer foundation in his office, and which will without doubt, with our present knowledge of cancer therapeutics, be of as much value to the public as our cancer research foundation. There are some points with regard to the anatomy and physiology of the cervix which must be kept constantly in mind at every office examination if this problem is to be approached in a scientific manner.

The cervix is really the lower, or constricted segment of the uterus. It begins at the external os and ends at the internal os. Histologically, the portio vaginalis is covered with stratified squamous epithelium. The canal is lined with branching racemose glands made up of columnar epithelium which secrete a clear viscid mucus which constantly flows through the canal, thus forming an effective barrier against infection from all organisms except three: gonorrhea, tuberculosis, and syphilis, unless the integument is broken by instrumentation, parturition, or infection by one of the three organisms just mentioned.

Now in this discussion, space will not permit consideration of the specific infections, and only injuries will be covered. But please bear in mind that the ultimate picture is the same, whether it is a specific infection or a mixed infection, resulting from injury.

In approaching the pathological picture of the post-partum cervix, we will first consider the cervix which shows no demonstrable injury. It is impossible to imagine a canal which normally stands closed dilating to the size which will permit the passage of a fetal head without considerable injury to this delicate mucous membrane, i.e., contusion and fissuring; thus breaking down the barrier against invasion of the low grade bacteria which normally inhabit all of our mucous passages. The infection may gain access in two ways. It may occur in the first few days of the postpartum period, and as involution occurs the organism is carried deep into the body of the cervix, or if infection fails to occur during the lying in period, these slight injuries which heal by means of granulation or lymphoid tissue have not the power of repelling attacks against the ordinary bacteria, and again the deep racemose glands are invaded. This is a slow process, sometimes requiring months to make its appearance.

The work of T. K. Brown, of St. Louis, proves that anaerobic bacteria play an important role in these infections. Histologically these infections are characterized by a very marked round cell infiltration into

the body of the cervix itself, i.e., periglandular and subepithelial. This round cell infiltration, with its resultant edema probably results in pinching off portions of the racemose glands, thus forming cysts which occur deep in the body of the cervix or appear on the portio vaginalis as Nabothian cysts. Now so much for the so called uncomplicated cases, i.e., those cases without demonstrable lacerations. Exactly the same pathological process is duplicated in the frank lacerations, except the whole process becomes magnified many times due first to the interference with blood supply from cicatricial scar contracture, and second due to the increase in amount of lymphoid tissue developed around the site of the injury.

The next step in the pathological development of this condition is the eversion of the cervical canal, and the downward displacement of columnar epithelium. This is caused by pressure from edema in the pinched off racemose glands, and swelling in the periglandular connective tissue of the body of the cervix. The internal pressure thus produced in the body of the cervix finds much less resistance in the direction of the cervical canal than toward the periphery of the cervix with its connective tissue and muscle, and as a result the canal is literally pushed out of the external os.

For the past ten years, it has been the rule in our service to examine visually all cervicies immediately following the third stage, and have found a rather definite percentage of cases which show an eversion of the columnar epithelium, particularly on the anterior lip immediately following delivery. This lesion was described by De Lee many years ago<sup>4</sup>. It is a definite slipping downward of the layer of columnar epithelium on its sub-epithelial or basement membrane. These cases, followed through, return at post-partum examination showing a definite downgrowth of columnar epithelium over the portio vaginalis, due no doubt to the fact that as involution occurs this columnar epithelium is pinched off and left remaining outside the external os, because it has not the power of involution as has the muscle and connective tissue fibers of the cervix. It is also important to remember that the cervix rides constantly in contact with the posterior vaginal wall and it has been proven by Reed<sup>7</sup>, Kidd & Simpson<sup>10</sup>, that when the columnar epithelium, which is normally bathed in a slightly acid medium, comes in contact with the slightly alkaline medium of the vaginal canal, it produces a proliferation of columnar epithelium, which accounts for the progressive development of these downgrowths.

It is also important to remember that columnar epithelium was not designed to repel infection which is normally found in the vaginal canal, and so it

gradually becomes infected or reinfected. This pathological condition is generally believed to be an erosion. It is in reality only a downgrowth or a misplacement of columnar epithelium<sup>8</sup>.

The effect of chronic cervicitis upon the general health of the individual is most profound<sup>5,9</sup>, and the temptation is great to diverge on these symptoms of pelvic pain, lumbosacral arthritis, and general malaise which are being constantly overlooked, but space will permit discussion of only one phase, i.e., its bearing on the production of carcinoma of the cervix.

Ever since women have been having babies, this pathological picture has surely been present in their cervicies, with, as you all know, its resultant leucorrheal discharge. And ever since doctors have been delivering these women, they have been inclined to tell patients that more or less leukorrhea was normal for a parous individual. Now why did doctors make these statements? Simply because no one had ever been able to effect a cure except by a more or less radical operation and the only method of palliative treatment known in the early days, and I am embarrassed to state that even today a great many men are still using it, was to apply some antiseptic to the portio and cervical canal, and then insert an ichthyol and glycerine tampon intravaginally. Now, when we study scientifically the anatomy, physiology and pathology of the cervix, we could scarcely devise a better procedure to prevent healing. First, strong antiseptics produce proliferation of columnar epithelium and second, because tampons prevent drainage, which is absolutely essential for the cure of these cases.

It was not until 1906 when Hunner<sup>6</sup> began to experiment with his cautery that any light whatsoever was found in the eradication of this pathological picture. There were, of course, as in all new ideas of treatment of any disease, a great many mistakes made before a rational routine therapy was standardized.

The earliest technique used was that of the massive cautery with heavy points over the portio alone, with often surprisingly good results. The downgrowth of columnar epithelium could be destroyed and drainage in the glands of the anterior portion established. The patient would be well for a time, but due of course to the infected glands higher in the canal, symptoms were bound to recur.

We then began carrying this heavy cautery higher into the cervical canal, which treatment frequently resulted in strictures, due to the extensive destruction of connective tissue and muscle. These large cautery tips would destroy so much tissue that scar contraction would close the cervical canal. Next came the use of the fine nasal cautery. This is the most suc-

cessful method yet devised because the cautery surface is so small that it is impossible to destroy too much tissue, and constructed as it is the incision cannot be carried too deeply, even in inexperienced hands. This simple little instrument will cure early cases of cervicitis resulting from injury provided there has not occurred too great an amount of proliferation. The failures occur in the far advanced cases with marked hypertrophy where the enormously enlarged cervix carries the glands so deeply that they cannot be reached by so delicate an instrument.

The evolution of electric treatment of cervicitis has continued until at the present time the electro-coagulation technique, with current derived from some form of diathermy apparatus, using bipolar electrodes has supplanted surgery of the cervix except in cases of extensive lacerations, and very far advanced infections. As a matter of fact surgery of this organ has always been unsatisfactory. The old amputation will not permit future pregnancies. The Strumdorff operation looks very nice on paper, but in the hands of most of us, the results are often disappointing. Sometimes strictures occur, or insufficient amounts of tissue is coned out and the infection recurs. As for the surgical repair of lacerations, it is doubtful if it is often necessary as long as the cervical tissue is kept free from infection by the cautery methods. At first these cervicies were thought to be cured of infection by the deleterious effect of heat on the organisms, but now we realize that the benefit comes almost entirely from drainage. Realizing that drainage is the most important factor in the cure of any infection, this seems a most rational line of thought.

After quite a number of years of use and experimentation with various types of cautery and cautery tips, and with various types of electro-coagulation units, the following requirements have been found to be necessary in a coagulating electrode:

1. One which may be inserted in the cervical canal to the internal os.
2. One which may be adjusted to the varying lengths found in various cervical canals.
3. One with which the coagulating depth can be accurately gauged.

The type which very nicely fulfills the above requirements is found in the Willomack electrode. In this instrument the coagulation occurs between the two electrodes which may be inserted the full length of the cervical canal. It is provided with an adjustable cuff which fits against the external os, thus preventing sparking across exposed portions of the electrodes, and third, the coagulating depth can be very accurately gauged by testing with raw meat. For instance, when a greater length of electrode is ex-



posed, i.e., a long cervical canal, a longer period of exposure is necessary for a given depth of coagulation than would be necessary for a short canal. This, it is plain to see, can be very easily worked out for any given diathermy apparatus. Our work has been done with the Aloe sixteen m.m. diathermy unit.

In this manner the cervical canal is coagulated to a depth of three to five m.m. depending upon the amount of hypertrophy from the external to the internal os, at ten, two, four, and eight on the clock dial. For the treatment of the portio vaginalis of the cervix, the instrument is provided with a tip which fits over the two electrodes and may be adjusted to any depth of coagulation. With this the portio may be either stippled or linear incisions may be made at ten, two, four, and eight on the clock dial. This is an office procedure, and may in most instances be carried out without even a local anaesthetic. In cases of far advanced infection with marked hypertrophy, conization may be necessary. This, however, is regarded by the author as a hospital procedure, requiring an anaesthetic.

These procedures are not entirely devoid of risk, however, particularly if a retroversion or retroflexion of the uterus is present. Cases of severe pelvic peritonitis have been reported with an occasional mortality. In our private practice two cases of pelvic peritonitis have occurred in the last three hundred cases—both resulting in complete recovery.

Electro-coagulation properly carried out will not produce stricture of the cervix.

#### BEARING OF CHRONIC IRRITATION ON PRODUCTION OF CARCINOMA

There are in all discussions concerning the etiology of carcinoma at least two facts upon which investigators agree, viz., first, that chronic irritation is responsible in some manner for the production of carcinoma and second, that there is some constitutional factor X which must be present for the production of carcinoma even in the presence of chronic irritation.

Now, up to date, no investigator has ever had the temerity to publish this statement in so many words, yet they feel that since we have at hand the means of keeping the cervix free from chronic irritation, i.e., infection, we have inadvertently come on the means of preventing at least a large proportion of carcinoma of the cervix. In view of the fact that we are unable to influence factor X it then becomes necessary to control the factor of chronic irritation in order to break down the equation factor X + chronic irritation = carcinoma.

Now let us see how frequently these lesions of the cervix occur following delivery. Novak found in a

series of 3,000 women examined after only one child, eighty-five per cent showed lesions from one to twelve months following delivery. In women having had two or more children he reported ninety-nine per cent showing lesions of varying grades. In any office limited to private practice the percentages will naturally run lower. In our office the percentages are ten to fifteen per cent lower.

This lesion is about the only one which modern scientific obstetrics is unable to prevent during pregnancy, delivery, and the post-partum period, but modern gynecology has shown the way to its correction. It is quite evident that if we could teach the rank and file of the profession to examine each post-partum case three times during the first year following delivery, with a speculum and a good light, and be prepared to treat intelligently the lesions he finds, we could show a most amazing diminution in the incidence of and ultimately in the mortality rate of carcinoma of the cervix.

#### REFERENCES

1. F. L. Lynch—*American Journal of Obstetrics and Gynecology*. 22: 550-559. October, 1931.
2. F. H. Falls—*Northwest Medicine*. 36: 93-96. March, 1937.
3. J. R. Goodall and R. M. H. Power. *American Journal Obstetrics and Gynecology*. 33: 1050-1072. June, 1937.
4. DeLee. *Obstetrics*.
5. N. F. Miller. *California Western Medicine*. 47: 81-33.
6. G. L. Hunner. *Journal of American Medical Association*. 46: 191-1906.
7. Philip J. Reed. *American Journal Obstetrics and Gynecology*. 10: 95-1925.
8. K. V. Bailey. *Surgery, Gynecology and Obstetrics*. 50: 513. March, 1930.
9. C. H. Mayo and C. F. Dixon. *Collected papers Mayo Clinic*. 19: 536-1927.
10. Kidd and Simpson. Oxford Press. 1926.

## TULAREMIA—REPORT OF THREE CASES

H. B. Melchert, M.D.

Council Grove, Kansas

"Rabbit fever", "deer fly fever" or tularemia is an infectious disease which occurs primarily in nature as a fatal Bacteremia of wild rodents, especially rabbits and ground-squirrels. Secondarily it occurs in man, transmitted by the bite of insects or contamination of the hands or conjunctival-sac with body fluids of infected rodents or insects.

A number of medical men in the United States boast of it as "the first American disease". Butchers and trappers had long known that a strange sickness sometimes came from skinning rabbits and handling hides. Beginning in 1907 various United States physicians described an illness which they called "rabbit fever," "deer fly fever" or a plague like disease of rodents. In 1912, Drs. George Walter McCoy and Charles Willard Chapin of the United States Public

Health Service, isolated a new organism from sick ground-squirrels in Tulare County, California and named it *Bacterium Tularense* after the county. Not until 1912 did Dr. Edward Francis of the United States Public Health Service discover that all were the same disease and named it tularemia.

Up to 1924 only fifteen human cases of tularemia had been reported in the United States. Up to 1933 according to Francis<sup>1</sup> there were 2720 cases reported. But as physicians have begun to recognize the disease there has been a rapid increase, there being 1012 known cases last year. Human cases have been reported from forty-six states and the District of Columbia.

Cases of tularemia have been reported from foreign countries as follows: Japan 1925; Russia 1927; Norway 1929; Canada 1930; Sweden 1931. More recently reports of cases from Australia, Turkey and Austria are recorded.

Transmission among wild animals is believed carried on by blood sucking lice, flies, ticks and fleas.

According to Francis<sup>2</sup> most rodents and wild animals as well as man have a high susceptibility with the following exceptions: Slight susceptibility in rat, cat, sheep and goat; non-susceptibility in horses, cattle, hogs, dogs, foxes, chickens, pigeons, turkeys and badgers.

*Bacterium tularense* is a small pleomorphic organism, gram-negative, non-motile and non-spore bearing. It grows only under aerobic conditions, a temperature of fifty-six to fifty-eight degrees C. kills the organism, as also do the ordinary disinfectants.

Francis<sup>3</sup> describes the disease as occurring in four clinical types:

1. Ulcerglandular Type—The primary lesion is a papule of the skin, later an ulcer forms and is accompanied by enlargement of the regional lymph nodes.

2. Oculo-glandular Type—The primary lesion is a conjunctivitis and is accompanied by enlargement of the regional lymph nodes.

3. Glandular Type—There is no primary lesion at the site of the infection but there is enlargement of the regional lymph nodes.

4. Typhoid Type—There is no primary lesion nor is there glandular enlargement.

If this classification serves no other purpose it should help keep in our minds that cases of tularemia do occur without any evident manifestations.

Sources of human infection vary widely<sup>4</sup>. The majority of cases reported are from dressing wild rabbits. In the western United States certain ticks and horse flies are the cause of a considerable number of cases. A few cases are reported from handling almost all the common wild and domestic animals except

horses and cattle. A number of cases have been reported among laboratory workers, also a few from eating insufficiently cooked rabbits. Recently a case was reported in the newspapers of a young woman contracting the disease from carrying a "good luck" rabbit foot on a journey across the continent.

In attempting to reduce the incidence of this disease, the first problem is to educate the public, just as it is in attempting to control many other diseases. Publicity on the number of cases in Kansas would be a good thing for both laity and medical men. The average number of all cases reported to the Kansas State Board of Health for the period 1930 through 1937 is twenty-four per year; the lowest number being sixteen reported in 1930 and the highest, thirty-eight cases reported in 1932. In 1930 and 1934 there were no deaths among the reported cases; in 1935 there were four deaths out of seventeen reported cases and in 1937, seven deaths out of twenty-two reported cases. The other years had one reported death each.

There have been no reported cases where the infection has been transmitted from man to man.

The period of incubation is usually given as from one to ten days, the average being three days. The onset is usually sudden with headache, malaise, fever, chills and often vomiting, abdominal cramps and diarrhea. Fever is usually continuous and lasts from two weeks to two months. Weakness, vertigo, sweats anorexia and loss of weight are present to some extent in all cases. The white blood cells are moderately increased but the count is of no diagnostic importance according to Francis<sup>4</sup>. A skin eruption of varied character is present in some cases.

Recovery is slow and may take place in from one month to six or twelve months. Several cases are reported with recurrence of symptoms after several months of apparent freedom from any symptoms. Suppuration of lymph glands has been reported from four to twenty-four months after the onset. Francis<sup>3</sup> states, "Recovery usually occurs without evident sequelae".

Complications reported are pneumonia, meningitis, appendicitis, bronchitis, pleural effusions and coronary insults to previously damaged hearts.

Although tularemia is a relatively new disease considerable literature has accumulated. I shall not attempt to make a review of the literature but will briefly mention some cases reported which may help us bear in mind possible modes of infection or cases which present interesting clinical features.

Dudesill<sup>5</sup> of Indianapolis reports a case in a woman fifty-nine, contracted by the bite of a kitten. The patient was trying to feed the kitten while its mother was sick. The woman and the cat slowly recovered.



The kittens both died. The cat was known to have brought in a rabbit a few days before.

Bowe and Wakeman<sup>6</sup> report a case in a woman in mid-pregnancy contracted while dressing a rabbit. They report the apparent effects of the disease as a moderate anemia and painless uterine bleeding near term not due to placenta praevia and the presence of agglutinins in dil. (1-80) in the baby's blood at birth, which subsequently increased after nursing a few days. Mother and baby both recovered.

Kavanagh<sup>7</sup> in a review of 123 cases reports three babies delivered during the height of the mother's infection without change in the course of the disease or the delivery except one birth was premature.

An increasing number of cases of pulmonary involvement are being reported the last three or four years, although the first reports of tularemic pneumonia as a clinical entity appeared in 1931 from three separate sources as mentioned by Sloan<sup>8</sup>, et. al.

Winter<sup>9</sup>, et al. reported four cases of the pulmonic form, all of which recovered. These cases were all contracted from handling wet wool and in none of them was there any history or sign of primary ulcer or glandular involvement.

Warring and Cullen<sup>10</sup> report a case discovered in the Maryland Tuberculosis Sanatorium from which they were able to isolate bacterium tularensis from the pleural fluid during life.

Tularemia has to be differentiated from influenza, septic infection, typhoid, sporotrichosis, undulant fever and tuberculosis.

There is an absence of agglutinins during the first week but they are present during the second week and reach their height during the third week and may reach a titre of 1:1280. Agglutinins persist in the blood stream and have been reported present as long as twenty-four years after onset of the disease. One attack confers immunity.

Treatment is given as symptomatic by most writers and serum described as useless. However, during the past two years Sharp & Dohme in collaboration with Dr. Lee Foshay have developed a serum which is being used considerably but with the usual variation in reported results.

Literature by this company recommends a skin test made with anti-tularemic serum as an aid to early diagnosis, especially during the first ten days of illness when agglutinins are not yet present in the blood. They recommend a skin wheal made with it from three to five m.m. in diameter and the reaction read after a forty-eight hour interval.

Mortality is given as four or five per cent by most writers. Foshay<sup>11</sup> thinks septicemia is the chief cause of death and that the rapidly fatal cases are individuals having no natural resistance to the infection.

The third week is considered the most dangerous period and the most deaths occur on the sixteenth day.

## REPORT OF THREE CASES OF TULAREMIA WITH AN UNUSUAL MODE OF INFECTION

### CASE I

W. P. M. white male aged twenty-nine, a farmer by occupation was seen May 16, 1937 complaining of fever, vertigo, chilling, night sweats, malaise and sores on hands and forearms with swollen and painful epitrochlear and axillary glands of three or four days duration.

Patient stated an older man and wife with whom he lived were also sick and all started at the same time but with considerable variation in symptoms. However, by the time the patient came in all three had malaise, fever and sores on their hands with regional adenopathy.

On being questioned as to what they had all been handling and eating it was learned that they had had a mess of fish caught in a trap in the river. However, the patient had not eaten any. The patient also related the fact that all three had been feeding a premature calf by letting it suck milk around their fingers.

At the following visit the history was pieced together as follows: The patient skinned a jack rabbit caught by a German police dog May 8. It was thought to have been the first jack rabbit the police dog had ever caught. However, the patient and his boss saw the dog catch the rabbit. After skinning the rabbit it was placed in a fish trap in the river. The following day the patient and his boss cleaned a nice bunch of fish caught in the trap and the boss's wife rolled them in flour and fried them. The patient ate none of the fish but the boss and his wife did.

On May 11 two days after cleaning the fish the patient noticed chilliness, malaise, fever, sweating, headache and a sore knot under his left arm but kept on working all day. The following day the same symptoms continued, with loss of appetite, a bad taste in his mouth with a foul breath and an ulcer developed on the web between the ring and middle fingers of the left hand and others followed but the patient worked till he presented himself May 16 which was the fifth day after the onset of symptoms.

On physical examination the patient appeared acutely ill; temperature 101; pulse 96 and weight 165. Both hands at the finger webs showed peculiar appearing ulcers with undermined edges and peculiar papulo-pustular skin lesions on the forearms with marked and painful epitrochlear and axillary adenopathy.

The patient was put on symptomatic treatment and

skin lesions developed on the back and over the body in the next two or three days. Only slight improvement was noted and the patient's weight dropped fifteen pounds in one week. An agglutination test for tularemia was reported positive in a dilution of 1:320 on May 27. The following day fifteen cc. of antitularemic serum was given intravenously and repeated on the second day. The patient volunteered the statement that his glands were not nearly so sore after the first injection of serum.

On May 30, two days after the first administration of serum, the patient had a pulse of sixty-eight and temperature of 98<sup>4</sup>. The temperature was never above normal during the following two weeks that a record was kept. Weight on June 12 was 159, a gain of nine pounds in two weeks. The ulcers slowly healed in about three weeks time. The regional lymph glands receded slowly without suppuration but were swollen for three months and his epitrochlears are still palpable. The patient is in apparent good health.

#### CASE II

R. J. N. White male, age fifty-two years, referred to in reporting the first case as the "boss" was first seen on May 20 with ulcers on his hands and regional adenopathy, fever, night sweats, foul taste and breath, unable to think or remember and very nervous with difficulty in talking.

Patient gave history of becoming acutely ill May 12 three days after cleaning the fish and eating of them, with chills, fever, vertigo, headache, vomiting, abdominal cramps and diarrhea lasting two or three days. Temperature said to have ranged from 101 to 103.

This patient's serum agglutinated in dilution of 1:160. His symptoms gradually abated. His temperature ranging from 99 to 101 degrees for six weeks despite intravenous administration of serum on May 28 and 29 and intramuscular injection on June 9. Patient voluntarily stated he felt stronger after the serum. His ulcers healed in three weeks but the axillary adenopathy persisted and an abscess was lanced in the left axilla July 23. The abscess healed promptly. Patient continued to complain of bad taste, foul breath and bronchial cough with considerable expectoration and dyspnea on exertion for two months. The scattered, rather generalized papulopustular dermatitis kept appearing in crops mostly over the arms, shoulders and back for several weeks. The patient has now been in apparently normal health for six months.

#### CASE III

Mrs. A. J. N. white female, age fifty-two years, referred to previously as "boss's wife", was first seen on May 16 with an ulcer on the finger web, adeno-

pathy, chilliness, fever, night sweats, malaise, headache, etc.

Patient gave history of feeling bad the evening of May 11 forty-eight hours after cutting up and frying the fish. Her finger became sore but patient continued her work and had no fever till May 16 the first day seen.

Patient subsequently became very ill and weak with temperature 100 to 102, severe night sweats, anorexia, foul breath and bad taste in her mouth. Her spleen became palpable in the second week and patient appeared extremely ill, very nervous and unsteady in the movements of her hands and her voice. She was unable to think or remember. No dermatitis appeared. A positive agglutination report in a dilution of 1:80 was received. Her temperature dropped to normal the first day intravenous serum was given, and no fever was ever recorded after that. This lady made the most rapid improvement of any of the three and had previously appeared to be in the most danger. She had rapid disappearance of her adenopathy and ulcer, gained weight and strength and her nervousness disappeared.

The day these patients took their second dose of serum one of them (Mr. A. J. N.) happened to think that they had caught a second batch of fish in the trap with the same bait on the following day and had given them to a friend. On phoning the friend's house it was learned from his wife that he had a similar acute illness with sores on his hands, etc. starting a day later than my patient. Another interesting sidelight is that some fish from the first catch were cleaned and put in a cold storage locker for some relatives, who later consumed them without any deleterious effect.

The serum used was that developed by Dr. Lee Foshay and produced by Sharp and Dohme. All three patients were given two intravenous injections of fifteen cc. each on successive days without any reaction. As to the effectiveness of the serum two of the three cases improved markedly, one in twenty-four hours, the other in forty-eight hours after administration. The third case seemed to be benefitted only slightly. The improvement in the two instances seemed to be too marked and prompt to have been a coincidence. However, about the only conclusion that can be drawn is that serum administration should be worth trying on other cases.

#### REFERENCES

1. Francis, Edward: Tularemia, Jour. Amer. Med. Assoc. 84,1243-1250, April 25, 1925.
2. Francis, Edward: Tularemia, Amer. J. Nursing, 34:1-5, January, 1934.
3. Francis, Edward: Tularemia Cecil's Test Book of Med., 3rd Ed. P. 378-381.
4. Francis, Edward: Symptoms, Diagnosis and Pathology of Tularemia, Jour. Amer. Med. Assoc., 91,1155-1160, October 20, 1928.
5. Dudesill, C. L.: Tularemia From the Bite of a Nursing Kitten,



- J. Amer. Med. Assoc., 108,2118, June 1937.  
 6. Bowe, Dudley P. and Wakeman, Don C.: *Tularemia and Pregnancy*. Jour. Amer. Med. Assoc., 107:577-578.  
 7. Kavanagh, C. M.: *Tularemia: A consideration of 123 cases with autopsy in one*. Arch. Int. Med. 55:61, January 1935.  
 8. Sloan, LeRoy H.; Freedberg, A. S. and Ehrlich, J. C.: *Tularemia Pneumonia*: Jour. Amer. Med. Assoc., 107, 117-119, July 1936.  
 9. Winter, Malcolm D., Farrand, Brownlow C., Herman, Harry J. Jour. Amer. Assoc., 109, 258-262, July 24, 1937.  
 10. Warring Fredrick C. Jr. and Cullen, Victor F.: *Tularemia with Pleural Effusion*. Jour. Amer. Med. Assoc., 107, 1365-1367, October 24, 1936.  
 11. Foshay, L.: *Cause of Death in Tularemia*: Archives of Internal Medicine, 60:22, July, 1937.

## DIAGNOSIS AND MANAGEMENT OF HYPERTHYROIDISM\*

Paul E. Craig, M.D.

Coffeyville, Kansas

The surgical management of goiter has been profoundly influenced by each period of scientific advancement until today, though many problems still confront us, thyroidectomy performed upon a patient adequately and individually prepared, is a relatively safe procedure.

The period of trial and error was beset with many pitfalls. No attempt was made through preliminary measures to reduce the intensity of the hyperthyroidism, with consequent high mortality and extremely unsatisfactory results. It was not until 1908, when C. H. Mayo advocated the ligation of one or more thyroid vessels, that thyroid surgery took its initial step forward.

The period of multiple operations, with an associated mortality of about three per cent, reduced the mortality and death rate of thyroidectomy by diminishing the blood supply and therefore the functional activity of the gland. Ligation of one or more poles was practiced prior to extirpation of one or both lobes, with fair results. The first attempt, however, which had a scientific approach to the problem of thyrotoxicosis was made by Frederick Muller in the year 1893. He observed that the nitrogen output of a patient suffering from toxic goiter exceeded the nitrogen intake. Plummer, in 1913, recognized that hyperfunction of the thyroid occurred in two distinct clinical forms, the exophthalmic and the adenomatous, with hyperthyroidism. This classification was practical and facilitated surgical treatment. Crile, about this time, substituted combined for inhalation anaesthesia, and proposed sharp knife dissection of the gland in order to minimize trauma. Dubois and Dubois, in 1915, devised a method for accurate estimation of the functional activity of the thyroid by

determination of the basal metabolism. In 1922, Plummer<sup>1</sup> established the value of administration of iodine to patients with exophthalmic goiter, preparatory to operation.

The iodine period has wrought a spectacular change in goiter therapy, and has made surgical approach relatively safe, due to a preoperative amelioration of toxic symptoms and a general improvement in cardiac, emotional, and nervous stability. The pharmacologic action of iodine upon exophthalmic goiters is purely mechanical. In such cases the iodine store is depleted. With the oral administration of iodine there is a rapid increase of the colloid content of the gland which produces a back pressure on the glandular acini and cell structure, effecting an edema within the gland. The mechanical action of the edema causes a stasis of the functional activity in the secretory cells of the glandular tissue. Because of lowered functional activity, the quantity of thyroxin poured into the blood stream is shortly diminished and clinical improvement becomes apparent. To bring about such a stasis, the action of the solution of iodine must be prompt.

Inorganic iodine is superior to organic salts, the average dose being 10 minims of an aqueous solution t.i.d. The popular belief that the administration of large doses of iodine causes hyperthyroidism is groundless, though iodism might occur. The continuous and injudicious use of iodine over long periods of time increases the risk of surgery, number of operations necessary, and the prolongation of the patient's disability. There is a chance that the patient may become "Iodine Fast," acquiring a tolerance to the drug. It has usually been found necessary to administer iodine ten to fourteen days preoperatively.

Blanck<sup>2</sup> reviewed 200 cases of exophthalmic and toxic adenomatous goiter from the standpoint of preoperative iodine therapy. The basal metabolic rate was lowered, the pulse became slower, and an increase in weight were brought about in each type of hyperthyroidism, and almost parallel response was noticed in the lowering of basal metabolic and pulse rates. Some cases in each group failed to respond to iodine administration, but the factors operating in each were the same. Cases of toxic adenoma paralleled those of primary hyperplastic goiter, but the results with iodine were not as good, though each were generally improved. Whether or not iodine is given postoperatively is a matter of choice, but according to Davison and Aries<sup>3</sup>, patients to whom iodine was not given, after operation had an average milder reaction than those who were given iodine. Then, too, those who developed toxic phenomena did not seem to be influenced any more rapidly by the use of iodine, whether given intravenously or by mouth.

\*Presented at the General Hospital staff meeting in Coffeyville on April 20, 1938.

The proper attack in anticipation of an impending postoperative thyroid crisis would, therefore, be not the use of iodine but the dilution of thyroxin in the circulation by the administration of parenteral fluids. It must also be remembered that the degree of toxic reactions is proportional to the degree of the preoperative preparation of the patient, and consequently to the amount of thyroxin delivered into the blood stream at the time of operation. There is no combination clinically shown to exist between iodine and thyroxin in the circulating blood. If, therefore, sufficient glandular tissue has been removed, and if the patient has been adequately prepared before operation, the use of iodine postoperatively seems to have no rational basis.

### CLASSIFICATION AND PATHOLOGY OF GOITER

1. Diffuse Toxic. The gland is nearly always enlarged, is symmetrical, and feels firm. The firmness is accentuated by iodination. Microscopically, there is a great hyperplasia of the high and columnar epithelium, with enfolding of the acini. The increasing epithelium replaces the colloid material, which may entirely disappear, thus affording an anatomic basis for hypersecretion.

2. Nodular Toxic, or Toxic Adenoma. In this type, encapsulation is characteristic. The adenomas may vary in size from a match head to that of an orange, and usually undergo degeneration. The formation of cysts is common. With each successive cycle, the cyst may enlarge, due to a coalescing of adjacent cystic acini. Hemorrhage into the cysts is frequent. The tissue surrounding the adenoma is hyperplastic, and furnishes most of the thyroxin secreted.

3. Diffuse Nontoxic. The acini are flat, and filled with dense, colloid material. The epithelium is low and flattened. Blood vessels are few. Small scattered areas of lymphoid tissue can usually be found.

4. Nodular Nontoxic. Grossly, this type of goiter appears the same as toxic adenoma. However, microscopically, the thyroid tissue does not show epithelial hyperplasia. The chief symptom from which the patients suffer is that of pressure. This type may become malignant, since ninety-six per cent of all malignant goiters arise from solitary adenomata.

5. Chronic thyroiditis is due to strangulation, destruction, and replacement of glandular epithelium by fibrous tissue. Hypothyroidism often results. The gland is exceedingly hard, but may be distinguished from carcinoma by the preservation of the normal lobulation and outline of the gland, although at times the latter may be indistinct. Howe<sup>4</sup> observed the thyroid gland at autopsy in patients with diseases other than hyperthyroidism, and found to his amaze-

ment, in a series of 1,000 postmortems, there were gross and microscopic evidences of greatly increased thyroid activity. Many of the specimens when examined at random would, in lieu of the micropathology, be definitely labeled "diffuse, hyperplastic, adenomatous, or nodular goiters." Yet the history in each instance was negative for hyperthyroidism. This would seem to indicate that there are other obscure factors at work in the production of clinical thyrotoxicosis.

Mora<sup>5</sup> studied the pathological changes which took place in the livers of mice when fed large doses of thyroid substance or when the animals were injected with extracts prepared from the glands removed at operation. There resulted an acute, diffuse, fatty, hepatic degeneration, followed by atrophy. This same type of liver damage occurs in hyperthyroidism, due to a continued depletion of glycogen. These experiments served to establish a definite hormonal interrelation between the thyroid and adrenal glands, for the mobilization of hepatic glycogen is directly influenced by suprarenal function.

### INDICATIONS FOR OPERATION

According to Drennen<sup>6</sup>, who reports an analysis of 300 consecutive thyroidectomies, the indications in order of importance are: (1) To prevent further damage to the heart, circulatory system, and liver. (2) To arrest the process of autodestruction of the gland per se. (3) To relieve pressure symptoms. (4) For cosmetic reasons. (5) In adenomata, to forestall toxicity and to prevent development of malignancy in discrete adenomas.

### INCIDENCE OF MALIGNANCY

Dinsmore and Crile, Jr.<sup>7</sup> reported 1,053 cases of goiter, among which two per cent were malignant. It was also estimated from their series that a preoperative diagnosis of malignancy can be made in only fifty per cent of the cases. Therefore, in one per cent of all patients subjected to thyroidectomy, malignancy is present although unsuspected. In addition, since fifty per cent of the goiters removed are diffuse, a type in which malignancy is rare, it follows that the chances that a goiter may show unsuspected malignant change are nearly doubled if it is of the nodular type. The estimated incidence of a preoperative undiagnosed malignancy in a given nodular goiter is roughly two per cent.

Metastasis to the pelvis, spine, sternum, clavicle, femur, skull, and ribs, occur in the order enumerated. Lancinating pain radiating upward behind the ear is a late symptom of thyroid malignancy.

### SYMPTOMS

Licht<sup>8</sup>, in presenting an analysis of 100 consecutive thyroidectomies, found the major symptoms of



thyrotoxicosis to have occurred most frequently in the following order: (1) Nervousness. (2) Palpitation. (3) Asthenia. (4) Tremor. (5) Loss of weight, and (6) Exophthalmos.

The minor symptoms, when classified in the order of frequency, are: (1) Dyspnea. (2) Diarrhea. (3) Sweating. (4) Dysphagia. (5) Dysphonia. (6) Pigmentation, and (7) Unexplained fever.

### DIAGNOSIS

In addition to glandular enlargement, over which a bruit may at times be heard, numerous tests and laboratory procedures have been devised and practiced in an attempt to accurately evaluate the intensity of the hyperthyroidism with variable results.

1. The Therapeutic Iodine Test should never be used without first determining the degree of thyrotoxicosis, and then only if the patient is being prepared for operation.

2. The Quinine Tolerance Test is, in the author's opinion, unreliable and obsolete.

3. The Determination of the Basal Metabolic Rate is accurate when performed by a trained technician, but emotional states, excitement, and the personal equation must be carefully weighed in the interpretation of the test.

4. Blood Chemistry. Namely, the blood cholesterol determination is considered the test of choice at the Lahey Clinic. The normal values, which range between 150 to 170 millograms per 100 cc. of blood, dropped to extreme low levels of sixty to eighty millograms in the presence of a severe hyperthyroidism. This method is both accurate and corroborative. Repeated tests on blood specimens will show a progressive rise under preoperative iodine medication and, when a persistent high cholesterol level is reached and maintained, indicates the time of election for thyroidectomy.

5. The Epinephrine Test, as described by Goetsch<sup>9</sup>, has been employed as a criterion for goiter operability. It is a simple method, free from technicalities, and can be used in the office at a minimum of cost to the patient. The test enhances or exaggerates all the vasomotor phenomena which are present in patients suffering from hyperthyroidism. The technique consists of a single subcutaneous injection of a .5 cc. of a 1:1000 solution of adrenalin. The time of injection is noted, and blood pressure and pulse readings are taken every five minutes. There is an early, and at times a sharp, rise in systolic pressure. The pulse rate is increased ten to fifty points. Concomitantly there is a moderate fall in diastolic pressure. At the end of fifteen to

twenty minutes, the pulse is greatly accelerated, respirations become deeper and more rapid, nervousness and vasomotor responses are accentuated, there is a peripheral constriction of the capillary beds, with a resulting pallor followed immediately by flushing, rising body temperature, and a slight diuresis. At the end of one to one and one-half hours, there is a return to normal. There is also a striking leukocytosis after injection of adrenalin in patients with hyperthyroidism. The count mounts to 30-35,000 with a preponderance of monocytes and a diminution of polymorphonuclear cells. There is a return to normal within about two hours.

### DIFFERENTIAL DIAGNOSIS

Any disease entity in which a normal or sub-normal temperature and a rapid pulse exist simultaneously must be given consideration. This disassociation of pulse and temperature occurs in the following pathological conditions:

1. Neurocirculatory asthenia is at times extremely difficult to differentiate from early hyperthyroidism, for vasomotor instability is a prominent feature of the disease. However, a careful psychiatric examination may elicit the cause. Symptoms of nervousness, tachycardia, tremor, and loss of weight are usually less pronounced. The basal metabolism is normal, or only slightly elevated, and the response to the epinephrine test is not so violent. The blood cholesterol is within normal limits. There is, as a rule, an absence of glandular hypertrophy.

2. Incipient pulmonary tuberculosis presents another problem, for in tuberculosis there is an increased compensatory metabolism. Here, as in the neuroses, vasomotor responses are active but the manifestations of tuberculosis are present: The afternoon rise in temperature, the dry, unproductive cough, night sweats, sputum examinations, the positive tuberculin test and, most important of all, the chest roentgenogram.

3. Heart disease. Although the heart itself is damaged late in the course of thyrotoxicosis, early hyperthyroidism must be differentiated from organic heart disease. Physical findings of murmurs, thrills, and enlargements, together with positive blood cultures, electrocardiographic tracings and fluoroscopic examinations will clarify matters. Nervous symptoms in heart disease per se are usually not prominent, and goiter tests are negative.

### THE ESTIMATION OF OPERABILITY FOR EXOPHTHALMIC GOITER

Seed<sup>10</sup>, who performed 1,950 thyroidectomies with only eighteen fatalities, attributes his success to care-

ful consideration of the following criteria of operability:

1. The weight curve of the patient. An accurate record of the weight gives one tangible evidence of the patient's reaction to the disease. If, for example, the patient has lost forty pounds during the preceding year but for the past six months has maintained a stationary weight, she is a fair risk. If she has lost twenty-five pounds in the past two months, the prognosis is worse. If there is a total loss of weight of only a few pounds during the past week, operation is contraindicated. A large loss of weight in a stout person is not so hazardous as a smaller loss of weight in a thin one. Briefly, a large loss of weight is clearly worse than a small one. A recent loss is disastrous. A stationary weight is advantageous, and a gain in weight eliminates most of the danger.

2. Strength. This is important to estimate because a strong patient will survive a severe post-operative reaction whereas a weak patient will succumb. If a patient is, prior to operation, able to do her ordinary housework and can step up on a chair unaided, she has enough strength to carry her through a thyroidectomy, plus a moderately severe postoperative reaction. If weakness necessitates absolute rest in bed, and is so profound that the patient cannot even sit up, an operation should not be performed.

3. Reaction to Stress and Strain. In determining the amount of reaction to stress and strain, one is in a way measuring the degree of nervousness or excitability. A restless, agitated patient is likely to have a turbulent recovery, if not an explosive exacerbation or the so-called crisis or thyroid storm. The speed of the patient's movements should be observed as she lies in bed. Any exaggeration of the exophthalmic stare, severity of the tremor, increase in pulse rate, or sharp elevation of the blood pressure should be noted. The patient is then requested to get up out of bed, put on her slippers and bathrobe, walk vigorously to the end of the hospital corridor and back, and then attempt to step upon a chair. While she is standing, the amount of breathlessness, the degree of exhaustion, any flushing or sweating of the face, and any change in the exophthalmos should be recorded. The tremor is again examined, and the pulse rate and blood pressure readings taken a second time. The findings are then evaluated. It can thus be determined whether or not the patient is extremely excitable, easily exhausted, or likely to respond sharply to operation.

On the basis of the three foregoing criteria alone, one can estimate the danger involved in thyroidectomy with remarkably little error. Other factors of lesser importance are:

1. Pulse Rate. A pulse rate during rest of 110 beats per minute is average. A rate of from 130 to 140 beats per minute probably necessitates a two-stage procedure. A high systolic blood pressure, accompanied by a low fading diastolic pressure indicates severe toxicosis.

2. The heart. If the patient has no ascites and no edema of the legs, and can walk a block, the heart will tolerate a thyroidectomy, regardless of its size, murmurs, irregularities, or the electrocardiographic or x-ray findings.

3. The Basal Metabolic Rate. Although the elevation of the B.M.R. is the best single diagnostic sign of early hyperthyroidism, it is by no means the best criterion in the determination of operability. If the rate is plus 50 or above, it is better to be more cautious than usual. If, on repeated tests, there is a large decrease of constant diminution in the rate, the outlook is more favorable. An elevated rate is more significant in an elderly than a young patient, both as regards diagnosis, and the estimation of the severity of the illness.

4. Duration of the Disease. It has statistical confirmation that a large percentage of patients who die postoperatively are those who have been sick for over one year.

5. Age. Patients past sixty-five years of age present a group in which there is a moderate increase in risk. Weakness in elderly patients is usually more profound than in younger ones, probably supplying the factor for the added danger. Exophthalmic goiter in childhood is rare, but when it does occur it seems to run a more violent course than in older persons.

6. Concomitant Diseases. These tend to increase the risk. For example, hypertension, asthma, diabetes, pregnancy, and arthritis are usually more troublesome than severe. On the other hand, true valvular organic heart disease, and diseases of the lungs, kidneys, and liver, are dangerous complications. Two associated conditions make thyroidectomy a grave procedure. These are a marked albuminuria and any degree of jaundice.

7. Technical Difficulties. These factors must also be included in estimating the risk. Sometimes they can be determined in advance, but more frequently they cannot.

From consideration of the factors just mentioned, the surgeon can determine the degree of risk in-



volved in a thyroidectomy. If he decides that the prognosis is good, he may operate immediately. If he considers the patient a poor risk, he has two alternatives:

(a) He may procrastinate longer, or (b) he may perform a subtotal lobectomy, rather than a subtotal thyroidectomy.

Obviously, in many cases the prognosis will be poor, no matter what he does or how long he waits. In others it will be good, no matter what he does or how long he waits. In others it will be good, no matter what he does or how quickly he operates. In the majority of cases, however, he can materially reduce the death rate by performing the operation at the point of maximum improvements.

### TREATMENT

It must be born in mind that a long, continued hyperthyroidism is responsible for the crisis, the cardiac failure, and the embolism, and that these are mostly responsible for our operative deaths. Therefore, if the postoperative morbidity and mortality is to be decreased, we must make an early diagnosis and institute treatment proportionate to the degree of thyrotoxicosis.

Kroger and Toland<sup>11</sup> report 2,070 thyroidectomies performed in Los Angeles during a period of eleven years, with a postoperative mortality of only 1.2 per cent. They stress the necessity for the continuous intravenous administration of a solution of 10 per cent glucose pre and postoperatively. This replenishes the depleted glycogen reserve of the liver. Patients suffering from acute hyperthyroidism are usually more or less dehydrated, and the glucose not only supplies nourishment, but restores water balance as well.

Lahey<sup>12</sup>, who has observed over 13,000 goiter patients, recommends the intravenous administration of 500 to 800 grams of glucose in twenty-four hours, and employs a fifty per cent solution. The author advises the following routine and treatment in preparation of patients showing evidences of severe hyperthyroidism.

1. Preoperative rest in bed of twenty-two hours daily, the patient being permitted to be up one hour in the morning, and one hour in the afternoon.

2. Each is placed on a high-caloric, low-residue diet.

3. Lugol's solution in ten minim doses is given three times a day for a period of from two to three weeks.

4. If the patient is acutely ill, and is vomiting or delirious, fifty drops of Lugol's solution in 1,000 cc. of normal saline will, when injected

intravenously, give a positive and satisfactory result.

5. Continuous venoclysis produces the best results when the patient is in an extreme toxic state. The needle is inserted into the saphenous vein just above the ankle, and forty to sixty drops of five per cent glucose is administered per minute, day and night, along with frequent injections of fifty per cent glucose. Usually about 500 grams are thus given over each twenty-four hour period. The urine should be examined frequently for sugar.

6. Patients who do not respond to iodine, or who show no progressive or convincingly obvious improvement after three to four weeks of nonoperative treatment, are subjected to subtotal thyroidectomy.

Those who remain totally unaffected by iodine are treated by performing first a right, then a left hemithyroidectomy. Six weeks should be allowed to intervene between the two operations.

7. At the time of operation the patient should reach the operating room placidly unconscious, as from a small dose of avertin by rectum, or from the oral administration of sodium amytal or nembutal. The author prefers to give three grains of nembutal one and one-half hours before surgery, and morphine sulphate grains 1/6 with scopolamine grains 1/200, forty-five minutes before operation. If the pulse is weak, atropine may be substituted for the scopolamine. The anaesthesia should be completed by gas, or local injections may be used if the patient is quiet and the pulse rate is under 140. If the pulse rate does not, as is usual, fall below 160 under complete anaesthesia, a limited or stage operation is indicated.

8. In no operation is anatomy respected so much and pathology so little as in the performance of a thyroidectomy. It is far better to be radical in goiter surgery than too lenient, for with multiple or incomplete operations there is an increasing return of symptoms within a period of five to fifteen years. It is no less important to remove all of the pathological tissue in goiter than it is to remove all the fibroids from a fibromyomatous uterus. For sake of statistics it is better to indicate in our operative records, "Thyroidectomy 24/25 removed, pathologically complete," or "Thyroidectomy 3/5 removed, pathologically, partial, or incomplete," in preference to the designation "Subtotal thyroidectomy." By this means we may prevent severe recurrent symptoms.

9. Silk is used in the place of catgut, and closure with drainage is found unnecessary.

### CONCLUSIONS

1. Hyperthyroidism is at times extremely difficult to diagnose.
2. Great and deliberate care should be exercised in arriving at the decision to operate upon the "bad risk" patient.
3. Multiple operations are advised in some of the most severe cases.
4. Two to three per cent of all cases of exophthalmic goiter cannot be made safe for operation by medical management.
5. Correct and complete preoperative preparation is essential to the patient's safety, and will minimize postoperative complications.
6. Sufficient tissue should be removed to prevent recurrence.

### BIBLIOGRAPHY

1. Plummer, Proceedings of the Staff Meetings of the Mayo Clinic, 2:13-206, March 25, 1936.
2. Blanck, Surgery Gynecology and Obstetrics, 62:213, Feb. 1, 1936.
3. Davison and Aries, Surgery Gynecology and Obstetrics, 64:999, June, 1937.
4. Howe, Personal communication. Department of Surgery, University of Illinois.
5. Mora, Personal communication. Department of Surgery, University of Illinois.
6. Drennen, The Annals of Surgery, 105:717, 1937.
7. Dinsmore and Crile, Jr., Surgical Clinics of North America, 859, August, 1935.
8. Licht, American Journal of Surgery, 270, August, 1936.
9. Goetsch, Minnesota Medicine, 10:631, October, 1935.
10. Seed, Clinical Medicine and Surgery, 45:165, 1938.
11. Kroger and Toland, Western Journal of Surgery, Obstetrics, and Gynecology, 45:316, June, 1937.
12. Lahey, Surgery, Gynecology and Obstetrics, 64:304, February, 1937.
13. Crile, Surgery, Gynecology and Obstetrics, 32:213, 1921.
14. Goetsch, New York Journal of Medicine, 18:259, 1918.
15. Beaver and Pemberton, Annals of Internal Medicine, 7:687, 1933.
16. Phemister and Delaney, Journal of American Medical Association, 100:586, 1933.
17. Pemberton, J. A. M. A., 94:1483, 1930.
18. Crile, The Diagnosis and Treatment of Disorders of the Thyroid Gland, Saunders Company, Philadelphia, 1932.
19. Clute and Pitcher, New England Journal of Medicine, 210:117, 1934.
20. Pemberton, Annals of Surgery, 507, October, 1936.
21. Haines and Pemberton, Archives of Internal Medicine, 1104, June, 1936.

is it pointed out that the dye materials incorporated in the antigens are useless to a trained serologist and will be equally valueless to one not familiar with the interpretation of flocculation reactions. Warning is not given of the danger which is always present in serologic procedures carried out with whole blood or of the complete reversal which inactivation may induce. Nor is it admitted that these methods have had only a limited practical test in hands other than those of the originators. Furthermore, a most grievous omission is the failure to recommend the use of positive and negative control serums as guides in the interpretation of the test. The care of glassware, the concentration and pH of the salt solution and many other factors requisite for trustworthy serologic results are omitted from the instructions. Thus, active commercial promoters may place in the hands of the individual physician everywhere a diagnostic function which is acceptable as efficient only when performed in laboratories adequately equipped and staffed by trained personnel. The claims for these technics are based on inadequate experience and the procedures themselves are open to criticism on many technical grounds. The science of serology has not as yet progressed to a degree of simplicity at which the detection of syphilis may be placed on a basis comparable to the detection of albumin in the urine. It is difficult to see how any premature steps in this direction can do other than work to the detriment of the patient with syphilis.—Editorial, Journal A. M. A. April 23, 1938, p. 1373.

The Chemistry of Vitamin D: Charles E. Bills, Evansville, Ind. (Journal A. M. A., June 25, 1938), states that studies of recent years have shown that there are several chemically distinct forms of vitamin D. Nevertheless, this vitamin is still spoken of in the singular, chiefly as a convenience and because its multiple nature was not recognized for about a decade after the first form was discovered. Custom limits the application of the term vitamin D to antirachitic sterol derivatives and to the unidentified antirachitis components of fish oils and other foods which are supposed to belong to this group. Of the several forms of vitamin D which have been recognized to date (five are well understood chemically and five are distinguished by fragmentary chemical and physiologic differences), two are known to be of prime importance in medicine. These are activated ergosterol and activated 7-dehydro-cholesterol. Other forms undoubtedly contribute to the total antirachitic effectiveness of certain agents, and it may be that the importance of some is greater than now appears. But for practical purposes, one may consider that all antirachitic medicines and foods owe their peculiar property chiefly to either or both of the two forms mentioned.

### ABSTRACTS

New Serologic Tests For Syphilis: The publication of the Committee on the Evaluation of Serologic Tests for Syphilis indicate that all too frequently both complement fixation and flocculation tests are carried out at a level of efficiency below that of which the tests are inherently capable. It is alarming that some commercial concerns are offering for sale to general practitioners relatively new and unestablished serologic test outfits containing antigen and other materials. The promoters claim that these methods may be carried out by the practitioner in his office, are suitable for rapid diagnostic work with whole blood and with spinal fluid, and are sufficiently accurate to guide any physician in the treatment of his patients with syphilis. The fact that the antigens for these methods are crude or that they may deteriorate rapidly is not mentioned. Neither

Undulant Fever: Its Treatment With Sulfanilamide: *Brucella melitensis*, originally known as *Micrococcus melitensis*, is pleomorphic, its morphology in part determined by the culture medium or the preparation used for its study. Morphologically it is considered variously by several authors on bacteriology to be a coccus, a bacillus or a coccobacillus. On this basis, with the effect of the drug in question established against certain other pathogenic bacterial forms, Robert L. Stern and Ken W. Blake, Los Angeles (Journal A. M. A., May 7, 1938), working independently, gave sulfanilamide in therapeutic doses to each of three private patients suffering from clinically and serologically established undulant fever. Highly satisfactory and prompt results with clinical cure followed. The maximal dosage according to present standards appears to be necessary.



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

The record attendance at the A. M. A. in San Francisco, and the report that the membership in the A. M. A. is the greatest in its history is evidence enough of the increased interest in organized medicine; quite contrary to many articles in the press that the A. M. A. is split and discouraged.

The House of Delegates of the A. M. A. again reiterated its opposition to state medicine, and in the event that some kind of plan is worked out for the lower bracket incomes, that the plan could be administered better by organized medicine, than by laymen or organized professional politicians.

I feel sure all the members of The Kansas Medical Society are pleased by the recent unanimous opinion of the Kansas Supreme Court. However, this is not quite final and we should not become too exultant or arrogant, for we are informed that the opposition are going to carry their problems to the legislature and expect to get redress for all their grievances; so it behooves all of us to become alert and active, and to do our utmost that the representatives that go to Topeka shall represent the people as a whole and guard their welfare, and not the representatives of a small organized minority that demand special legislation, for their own selfish interest.

The Council meeting held in Wichita, July 10, we feel was quite successful. We were honored by the presence of the attorneys representing the Society in our present litigation and also by Mr. Theo. Varner representing the Board of Medical Examination and Registration.

I am sure all present were impressed by their reports, and I have communications from them expressing their admiration for the very able group—The Council—in directing the affairs of the Society.

N. E. Melencamp, M. D., President.

---



---

## EDITORIAL

---



---

### MEDICAL ASSISTANCE IN KANSAS

The State Board of Social Welfare has prepared a report entitled "Medical Assistance in Kansas". The publication contains the investigations of the social welfare board on this subject and also the recommendations of a state advisory committee on medical care as to methods and plans for provision of indigent medical care.

The report represents some of the most constructive social thinking that has been done in the United States in the field of social planning for medical assistance.

The obligation to furnish medical care is placed upon local government. The report points out that this must be according to existing law and tradition in Kansas. It was found that the application of this principle in furnishing medical care has been carried out in such haphazard ways with the increasing magnitude of the problem that discontent has arisen among administrators of social welfare, public assistance clients and doctors. There has been no uniformity in methods of administration nor in payments to physicians. Plans for prompt and adequate medical care have not been developed to a degree of efficiency satisfactory to any of the interested groups.

According to the findings of the survey, four types of programs for medical care were found in operation. First, the county physician plan with one or more doctors on salaries. Second, county physician plan in which the county paid fees for services rendered by one or more selected doctors. Third, a group contract whereby the county paid to the local medical society or group or organized doctors at stated intervals a specified lump sum, in return for which all physicians participating agreed to furnish needed medical services to public assistance clients. The sum received was either placed in the group's treasury for educational purposes or prorated among the members. Fourth, a fee method of payment open to physicians, whereby a schedule of fees was established by agreement of the county welfare board with the medical society or with unorganized physicians, or whereby the amount of

payment was set by the county board or county director of social welfare.

The report emphasizes that no attempt was made in the survey to evaluate the adequacy of the medical services given under these programs and it is pointed out that a comparison of costs incurred under the various programs can in no way be taken to indicate the quality or quantity of the medical service actually rendered.

The state committee on medical care has sought to determine the best type of medical care for Kansas. It was agreed by the committee that the county board should estimate, budget and control the expenditures for medical care. This board should provide for an individual accounting of services rendered so that state and federal reimbursement may be obtained. It was agreed that county boards should provide the most adequate medical facilities and professional services. The maintenance of the usual physician-patient relationship in which the patient is given his choice of the available doctors is recommended. Compensation for all physicians rendering service to public assistance recipients is provided in the recommendations.

After considering all the data gathered in the survey the committee resolved that in their opinion the most feasible and desirable county plan for supplying medical care to public assistance recipients is by means of a contract between the county board of social welfare and the members of the county medical society organization, collectively or individually; the physicians included in the contract to be compensated for their services on a lump sum or controlled fee schedule basis by the county board of social welfare. For the purpose of eliminating difficulties in connection with the arrangement for medical service it is suggested that a liaison committee of physicians be appointed in each county society. In this way the county board could discuss medical problems with physicians qualified to furnish the board with information as to medical aspects of the program.

The plan proposed has the advantage of offering a uniform system of medical care in all counties of the state. It offers public assistance clients their choice of physicians, which is in line with the recommendations of the American Medical Associ-



ation. It offers compensation for medical services to physicians who are carrying a large amount of charity in their work.

The report carries considerable statistical data which should be studied in working out the most economical plan of administration compatible with high grade medical service.

The members of the state advisory committee on medical care deserve the highest commendation of the physicians of Kansas in devising a workable and uniform plan of medical service. In this effort the committee has sought the cooperation of Medical Economics Committee of the state society and every consideration has been given to the social aims and high standards of the organized medical profession of Kansas.

It is to be hoped that each county medical society in the state will study the recommendations of the committee and seek to establish the necessary relationship with their county welfare board, that the plan may be brought promptly into action.

---

## CANCER CONTROL

---

### MALIGNANCY OF THE CENTRAL NERVOUS SYSTEM

Donald F. Coburn, M.D.

Kansas City, Missouri

Centuries ago Galen is said to have stated, while commenting on some of Hippocrates writings, that he had seen a severely wounded brain heal. He could well modify his earlier statement to the effect that in surgical clinics today he was seeing tumors of the brain and spinal cord removed, and the afflicted individuals returning to a normal life. For in the past thirty years malignant growths of the central nervous system have become accessible to surgical attack, and often have been completely extirpated so that the patient's health was restored.

Tumors of the brain are estimated to compose approximately two per cent of growths in the entire body, and those of the spinal cord are said to be about one-sixth as frequent as those in the brain. About forty-five per cent of neoplasms of the brain are formed by gliomas, i.e., those tumors which are derived from the glial or supporting cells of the nervous system. These growths are usually diffusely invasive, poorly demarcated, and the least favorable for

a complete removal. They may be relatively solid or cystic if of the less malignant types, or soft, cellular and necrotic if composed of more embryonic cell types. The latter group are unfortunately too frequently seen and tend to discourage the surgeon who encounters them at operation. Tumors of the spinal cord are of the same types as those found in the brain and its coverings, excluding those arising from special structures as the pituitary and pineal glands.

The classifications of tumors and the frequency of different types is roughly as follows:

Gliomas—45 per cent.

Meningeal Fibroblastomas (Meningiomas)—10 to 15 per cent.

Pituitary Tumors—10 to 15 per cent.

Perineurial Fibroblastomas (Neurinomas)—7 to 10 per cent.

Congenital Tumors—2 to 5 per cent.

Blood Vessel Tumors—2 to 3 per cent.

Metastatic Tumors—4 to 7 per cent.

Granulomas—2 per cent.

Miscellaneous—2 per cent.

There is considerable variation in frequency of types in surgical clinics, due to class of patients seen, special interests of the surgeon, etc.

Symptoms of tumors of the central nervous system are produced by several mechanisms, viz; local invasion, pressure on adjacent structures, pressure from blocking of vascular or cerebrospinal fluid pathways, or by spread of the neoplastic cells through the cerebrospinal fluid. The syndrome of headache, vomiting and failing vision from papilledema is still with us, but fortunately because of earlier diagnosis is less frequently seen. Too often this triad means a late stage of cerebral compression, and lessened hope for relief through operation. Patients with neoplasms in an earlier stage are entering neurosurgical clinics, since our general practitioners and those in the various special branches of medicine are realizing that a wide variety of complaints may be found in individuals with such lesions. Convulsive seizures, commonly referred to as epilepsy, are being recognized as a very frequent symptom of a cerebral neoplasm in adults, particularly. Sensory attacks—sudden episodes of numbness and tingling in a limb or a part of it—are of similar diagnostic import. Double vision, unsteadiness of gait, impairment of a visual field, personality changes, transient sensations of whirling or falling, tinnitus and progressive deafness, progressive speech difficulties and many other symptoms arouse the physician to seek a cerebral tumor as a possible cause.

In a patient with some of the above mentioned symptoms, the finding of cranial nerve palsies, choked discs, mental changes, speech impairment, paresis of one or both limbs on the same side with

or without sensory abnormalities of the cortical or lower level type, and reflex changes pointing to involvement of the pyramidal tracts, suggests that one should search carefully for a tumor of the brain. The presence of incoordination of movements, ataxia and marked papilledema should stimulate one to look for a neoplasm in the cerebellar fossa or perhaps in the frontal lobes.

The early recognition of symptoms and signs indicating the presence of an intracranial tumor enables those carrying out more specialized tests to proceed with greater safety and to offer a better prognosis to patients suitable for operative procedure.

X-rays of the skull may reveal areas of erosion or thickening in the skull or calcified areas in the brain of diagnostic import. The removal of fluid from the subarachnoid space and replacement by a gas so as to fill the ventricular and subarachnoid spaces of the brain, and the x-ray studies of the head following this procedure—encephalography—is an invaluable means of localization of neoplasms. The direct injection of a gas into the ventricles with removal of fluid, and x-ray studies—ventriculography—serves the same purpose in individuals in whom high intracranial pressure, as evidenced by papilledema, contraindicates a lumbar puncture. Both of these procedures are of the utmost help, but are to be undertaken only by those who understand the procedures, the interpretation of the findings, and who are qualified to properly handle the emergencies which may arise during and following these tests. Alterations in the size, contour and displacement of the ventricular and subarachnoid spaces, as outlined by the injected gas, may afford an accurate localization of the suspected tumor.

Radiating pain in the back or limbs, associated with twitching of the limbs, weakness and/or paralysis of the limb, loss of sensation in the limbs or trunk, and weakness or paralysis of the sphincters suggests involvement of the spinal cord by a neoplasm.

Patients whose history includes some of these symptoms mentioned above, and who on examination show weakness or paralysis of the limbs, a sensory disturbance and an altered sphincter control are to be viewed as cord tumor suspects. Lumbar puncture, with carefully controlled jugular compression (preferably with graduated pressure obtained by the use of a blood pressure cuff on the neck), and a laboratory examination of the spinal fluid that includes cell count, globulin determination, total protein determination, colloidal gold curve and Wassermann test, will aid greatly in establishing or ruling out such a possibility. If there is evidence of something blocking the spinal subarachnoid space, the introduction of iodized oil above or below the lesion and the

visualization of this substance under the fluoroscope and with x-ray plates, will often definitely localize the level of the lesion.

Following the localization of a brain tumor by clinical and laboratory means, a bone flap may be turned back to permit exploration for a cerebral tumor, or a suboccipital craniotomy done to expose the contents of the cerebellar fossa. Intracranial pressure may be lessened by tapping the ventricular system and/or by the use of concentrated glucose intravenously. If the tumor is not visible when the dura is opened, or does not disclose its presence by alterations in the surface of the brain, it may be sought by the exploring needle and by the removal of tissue through a hollow needle for immediate pathological study by smear or quick frozen section. The location and type of tumor, the patient's physical condition, and his prognosis all must be carefully weighed before an extirpation, or a simple decompression is carried out by the surgeon.

A laminectomy is necessary to expose a spinal cord tumor. Usually the tumor is more easily identified in this region than in the cerebrum, but meticulous care must be exercised by the surgeon to avoid trauma to the cord. If the tumor is intramedullary, a biopsy may also be resorted to in determining the type of tumor with which one is dealing.

X-ray therapy may be used to retard the growth of certain types of tumors of the central nervous system, both of the brain and spinal cord. Usually, it is preferable to determine the type at operation, before roentgen therapy is instituted, in order to be sure of the possible benefit of the treatment and also to permit the leaving of a decompression to care for edema associated with the x-ray treatments.

Much relief can be afforded patients with malignancies of the central nervous system. Many of the brain tumors can be entirely removed and the patient may entirely recover. In other patients, in whom a rapidly growing glioma is present, relief of headaches, blindness and paralysis may be given for a period of months, during which time the individual may have an opportunity to complete unfinished business transactions and arrange for the future of his family. Many of those with spinal cord tumors can be relieved of their previously paralyzed limbs and be free of the discomfort and potential danger of sphincteric disturbances.

There are many malignancies of the central nervous system for which at the present little can be done but when one considers the rapid advances in the surgical and radiological treatment of these lesions during the past thirty years, he cannot help but realize that the earlier recognition of even these seemingly hopeless malignancies will in time result in their amenability to helpful therapy.



Type of Tumor	Pathology	Age	Sites of Predilection	Symptoms	X-Ray Diagnosis	Biopsy	Treatment	Prognosis
(A) Benign Bone Tumor (1) Exostosis (Osteochondroma)	Firm tumor, composed of cancellous bone and covered with cartilage.	10-25 y	Single or multiple. Near ends of long bones. Upper femur, upper tibia, lower femur, upper humerus. a) Phalanges of hands and feet. b) Sternum, ribs, long bones shoulder and pelvic girdles.	No clinical symptoms or swelling "rheumatic pain".	Structure like cancellous bone. Grows away from joints.	Microscopic examination not necessary before operation.	If interfering with function, simple excision.	Excellent
(2) Chondroma	Lobulated, partly gelatinous tumor, composed of fairly adult cartilage.	20-30 y		Soreness swelling, slowly increasing.	Areas of lessened density Medullary in origin Resembles bone cyst.	Location for prognosis more important than microscopic structure.	a) curettage, and cauterization. b) Resection or amputation.	a) 15 % recur b) 25 % become malignant
(3) Giant cell tumor	Brown tumor composed of uniform spindle cells and many giant cells of epulis type. No atypical bone formation.	20-30 y	Epiphysis of lower radius upper tibia lower femur	Pain tumor often spontaneous fracture.	Single lesion, osteolytic. Medullary in origin, cystic like, multifocal.	Reliable. Indicated in cases where amputation is considered.	Curettment and cauterization (Resection in advanced cases) followed by radiation.	Very good
(B) Malignant Bone Tumors (4) Periosteal Fibrosarcoma	Arising from periosteum, composed of spindle cells, which vary in size and form. Very little bone production.	after 30 y	Lower femur Upper tibia	Pain Swelling, disturbed function.	Single, osteolytic. Periosteal in origin Produces irregular ragged destruction.	Necessary. Reliable. Grade of malignancy determines extent of operation.	Resection or amputation, Preoperative Radiation.	About 40 % survive 5 yrs.
(5) Osteogenic Sarcoma	Production of immature and a typical bone, cartilage and osteoid tissue by tumor cells varying in size, form and staining quality. No round tumor cells.	10-25 y	End of diaphysis Upper tibia Lower femur	Pain tumor disturbed function.	Single, either osteolytic or osteoplastic, invades all three layers of bone. Ill defined limits. Sun-ray characteristics.	Necessary before op. Reliable, if the surgeon submit a sufficiently large specimen from the tumor itself (not surrounding inflammatory tissue).	Radiation, followed by earliest amputation (is the only hope).	5 % survive 5 years
(6) Ewing's Sarcoma	Sheets of polyhedral cells without intercellular stroma. Small dark nuclei. No bone formation.	10-20 y	Shaft of long bones Tibia Femur Humerus	Nocturnal pain. Fever Leukopenia or leucocytosis.	Single. Medullary in origin. Layers of new periosteum.	Indicated if amputation is considered. Microscopic diagnosis reliable.	Extensive radiation followed by Amputation (Resection).	12 % survive 5 years
(7) Multiple Myeloma	Masses and strands of plasmacells or larger round cells. Very scanty intercellular stroma. No bone formation.	50-60 y	Flat bones Ribs, spine, sternum Skull, pelvis	Multiple lesions Pain, skeletal deformities, Bence-Jones bodies in urine	Multiple lesions. Pure osteolytic. Bone destruction in round punched out areas.	Conclusive.	Radiation for relief of pain.	No cure
(8) Metastatic Carcinoma	Structure varies according to primary tumor. Most common: adenocarcinoma (prostate, breast, thyroid, hypernephroma).	55-65 y	Spine pelvis, Femur, skull, humerus	Severe "rheumatic" pain Anemia Spontaneous fracture.	Usually multiple osteolytic or osteoplastic. Destruction of bone is irregular in outline and not demarcated.	If primary tumor is overlooked and amputation is considered, biopsy is indicated. Otherwise not.	Radiation may relieve pain.	No cure
(9) Inflammation Myositis ossificans	Young connective tissue and new formation of bone trabecles lined with regular row of osteoblasts.	20-40	Thigh Elbow	Following single injury. Hard tumor forming within few weeks	Usually single osteoplastic, parallel new bone in muscle bands. No relation to bone.	Mostly reliable. In early cases the cellular tissue may be confused with sarcoma.	Supportive Avoid operation in early stage.	Good
(10) Syphilis	Syphilitic granulation tissue consisting of lymphocytes, plasmacells, Langhans' giant cells. Typical gumma may be absent.	20-30	Tibia Skull Sternum	Nocturnal pain Swelling	Multiple or single osteoplastic or osteolytic. New bone either parallel or perpendicular to shaft.	Not indicated, before Wassermann test or therapeutic test (anti-syphilitic treatment) is made.	Anti-syphilitic treatment.	Good
(11) Osteo-periostitis	Spindle cells are of uniform size and there are many inflammatory round cells. The newformed bone spicules are lined with regular row of osteoblasts.	15-35.	Femur Tibia Skull Humerus	Pain Swelling Stiffness in joints	Single, mostly osteoplastic. New bone either parallel or perpendicular (periosteal reaction).	Biopsy reliable and necessary, if malignant tumor suspected.	Incision and drainage of infected area.	Good
(12) Osteitis fibrosa incl. bone cyst	Proliferation of cellular fibrous tissue. Occasionally giant cells. Production of bone spicules.	5-15	Shaft of upper humerus Upper tibia Upper femur.	Swelling Pain Often fracture	Single lesion. Mostly osteolytic. Resembles giant cell tumor.	Biopsy reliable. In multiple lesions: Blood Calcium.	Collapse of bone cyst. Multiple lesions: Exploze parathyroid glands (Adenoma?)	Good

## BONE TUMORS

C. A. Hellwig, M.D. and

C. H. Warfield, M.D.

Wichita, Kansas

In 1932, 5,749 people died of bone sarcoma, in the United States as compared with 35,000 people dying of cancer of the stomach. Bone sarcoma, therefore, is fortunately rare. Of all the sarcomata of the bone which have been observed in recent years in the United States, only some 300 persons afflicted have been cured.

The rarity of bone sarcoma and its poor prognosis explain why the general practitioner is bewildered if he has to decide between a malignant and innocent bone tumor. The confusion in the classification of bone tumors was discouraging until recently, when the General Registry of Bone Sarcoma was established by the College of Surgeons and essential information disseminated about bone tumors. Enough material has been collected by this registry to establish the diagnosis, the prediction of the clinical course and the best method of treatment for the majority of bone tumors.

Two facts stand out in the treatment of bone tumors, which the physician who first sees the patient with a bone lesion, should keep in mind. First, the prognosis of bone sarcoma is still so unfavorable, that an amputation of an extremity is never indicated on suspicion only. All diagnostic data, including the microscopic slide, must be conclusive that the tumor is malignant. Second, biopsy should never be made except as a last resort, after all other diagnostic methods, including Wassermann test and x-ray of the lungs, have been employed.

The chart on page 302 is based on the facts collected by the Registry of Bone Sarcoma, and the classification recommended by this registry is followed. From a diagnostic standpoint, the predilection of certain tumors for certain bones, involving either shaft, metaphysis or epiphysis is highly important. Age is a very important factor in the diagnosis. In contradistinction to malignant tumors in other organs, pain is often the first sign of a bone sarcoma. Fever and leucocytosis is common in bone tumors. Syphilis has to be ruled out by serological tests in every case. The majority of bone tumors may be correctly diagnosed by an experienced roentgenologist, however there is general agreement that before amputation a biopsy should always be employed.

## BLOODGOOD'S RULES OF PROCEDURE

1. Do not perform an operation or biopsy unless there is definite evidence of an acute infection.

2. Do not perform an operation or a biopsy until the history, physical examination and all the laboratory tests are made and studied.

3. When clinical, laboratory and x-ray investigations are not conclusive and help is desired, the x-ray films and clinical and laboratory findings should be referred to the consultant before biopsy. When there is suspicion of malignancy, deep x-ray therapy is indicated while waiting.

4. In any case in which a mutilating operation is to be performed a biopsy should be made, immediately before operation.

---

## EYE, EAR, NOSE & THROAT

---

### PNEUMOCOCCUS SEPTICEMIA FOLLOWING A MIDDLE EAR ABSCESS

Charles T. Moran, M.D.

Arkansas City, Kansas

A child twenty-five months old developed an acute abscess of the left middle ear on January 29. The drum was bulging, and was incised. The ear discharged profusely, the patient had a comfortable afternoon, and slept well during the night. The next morning she was apparently normal and ate a good breakfast. At noon on January 30, she complained of being chilly and her temperature rose to 103.

Physical examination at that time was essentially negative except for a discharging left ear, and a slight hyperemia of the throat with hypertrophied tonsils. The white blood count was 19,000, polys 77, small lymph 23, the Schilling count showed fifty-four old cells, and nineteen new cells.

Prontosil two and one-half cc subcutaneously was given every four hours. Her condition throughout the day remained unchanged with sudden rise of temperature to 104 with demission to 99. Blood was taken for typing and culture, culture of discharge was also taken of Citrated blood.

Patient was admitted to the hospital January 31 and was given a transfusion of fifty cc. She had no reaction, her temperature continued to fluctuate the following day and reached 106. The patient was very restless and appeared to be more toxic. At this time 100 cc. of citrated blood was given.

X-rays of her chest taken that day were negative.



The following day, the third day in the hospital, her temperature gradually dropped during the night. The white blood count was 16,700, polys 75, small lymph 23, old cells 61, new cells 14. Report of the cultures were both positive for pneumococcus, type four. Her condition was improved, the ear was discharging well, temperature remained down all day and another 100 cc of citrated blood were given that evening.

February 3. White blood count this morning 10,600, polys 72, small lymph 28, young cells 9, old cells 66. Condition seemed improved, discharge from the ear had subsided, there was no mastoid tenderness.

February 4. Patient is restless this morning, and is nauseated and vomiting. The white blood count was 11,400, polys 81, small lymph 19, young cells 15, old cells 66.

Patient's left arm is swollen and painful in the area where she was vaccinated for small pox four days before the onset of her illness and her temperature rose to 102. The rise of temperature was due to the vaccination.

February 5. The discharge from the ear was decidedly decreased, the patient is much brighter and plays in bed. The edema and redness of the arm has subsided. Her temperature 100.1.

February 6. Temperature this morning 98, white blood count 6,800, polys 40, lymph 53, young cells 10, old cells 29, eosinophils 1.

Has had a very comfortable day, blood count normal, with the reappearance of eosinophiles and a definite shift to the right, which is a good prognostic sign that the infectious process has subsided. Temperature has been normal all day.

February 7. Temperature has remained normal. Patient dismissed from the hospital.

### COMMENTS

The above reported case is that of a female child, twenty-five months old with a simple otitis media, who developed a septicemia within twenty-four hours following the paracentesis.

The interesting factor is: In what manner did the infection gain entrance into the general circulation without involving the mastoid process?

Every purulent infection of the middle ear carries with it the possibilities of a number of serious complications.

In infancy and early childhood blood vessels, and lymphatics of the mucosa of the middle ear are in a more direct connection with the mastoid, jugular bulb, meninges than in adult life. Therefore, an ex-

tension of infection in the middle ear to these structures without macroscopic evidence that the osseous structure of the mastoid is involved is conceivable. Other sinuses than the sigmoid may be involved in suppurative disease of the middle ear. The superior-sagittal sinus, particularly in infants and early childhood has been noted. Primary thrombi may occur in the superior petrosal sinus and also the jugular bulb from the middle ear suppuration. The petrosquamosal sinus is important structure in infants that may carry infection from the middle ear to the general circulation and meninges.

There is another factor that might explain these cases. The jugular fossa in many instances has been shown to be extremely large, and protruding into the tympanic cavity. Barnhill in his anatomy shows a specimen in which the jugular fossa is greatly enlarged, and protrudes into the middle ear, containing several dehiscences.

Politzer, has noted in a number of specimens, that the jugular fossa had extended into the internal auditory meatus and showed many dehiscences.

The presence of these anatomic malformations will allow purulent material from the tympanic cavity to gain entrance into the jugular bulb. Many men have reported cases of primary thrombosis of the jugular bulb in children; Fremel, Schlander, Maybaum and Goudman and Friesner, with no apparent mastoid involvement. Fremel expresses the belief that the cause of a primary thrombosis of the jugular bulb is direct contact with the infection in the peribulbar cells of the mastoid process, while the opinion of other otologists seem to favor the infection of the bulb by the direct extension from the tympanic cavity into the bulb.

It seems important to stress repeated transfusions in all cases of septicemia. Prontosil was given over a period of forty-eight hours until the blood culture was reported, with apparently no effect in the temperature curve. The daily blood count is important and especially the Schilling count is of great prognostic value. In this case, when the temperature had been normal for twenty-four hours, the blood count revealed a definite shift to the left before the reaction from the vaccination was demonstrated by the rise in temperature. Also the absence of eosinophiles in the early stages and their reappearance when the infection had subsided is noteworthy.

### BIBLIOGRAPHY

1. Barnhill, "Anatomy of Head and Neck," Fig. 78, page 541.
2. Sutherland, J. M., "Otitic Sinus Thrombosis," *Archives Otol.* Vol. 27, January, 1938.

## TUBERCULOSIS CONTROL

### THE SEDGWICK COUNTY PLAN

The Sedgwick County Medical Society is developing the following plan in the tuberculosis work in Sedgwick County. It is perhaps well to hold in mind that Sedgwick is one of the more populous counties, which to some extent makes the handling of any medical problem somewhat more complicated.

The Sedgwick County Medical Society has a special committee on tuberculosis which functions in joint meetings with the county health department and with a special committee from the local division of the Kansas Tuberculosis & Health Association. During this past year this committee started in the year meeting regularly every two weeks until the more pressing problems were taken care of, and since then have been meeting about once each month. The following principles for the care of tuberculosis patients and tuberculosis suspects have been developed:

1. The full-pay patients are to go to their own physicians as in any other illness for whatever care and examination are necessary.

2. The part-pay patients who cannot afford regular private fees are to be sent by whatever organization deems their examination is necessary to the Medical Service Bureau of the Sedgwick County Medical Society, where part-pay arrangements are made for examination, x-ray, and laboratory tests, in line with the ability of the patients to pay and they are referred to the physician of their choice under such arrangements.

3. The indigent patients are cared for without charge in a clinic conducted by the Sedgwick County Medical Society in conjunction with the other clinic work that the Sedgwick County Medical Society carries on for the indigent patients of the county. In return for all of its indigent work the Sedgwick County Medical Society receives a lump sum payment each month from the County Commissioners.

Many organizational problems arise in connection with carrying on such work and following are various details that have come up and are of interest in the work:

1. The local branch of the Kansas Tuberculosis and Health Association pays a fee of \$2.50 for a chest x-ray film on semi-indigent patients

who cannot receive such service from the county relief agency and yet who do not have enough money to pay a private physician for the x-ray. These x-rays are taken by the recognized roentgenologists in the county and enables semi-indigent patients to receive a chest x-ray when indicated.

2. The need of adequate milk supply to certain undernourished children, tuberculosis contacts, etc., has been recognized and a special milk fund through charitable contributions is being set up under the joint management of the Sedgwick County Medical Society and the Sedgwick County Tuberculosis Association.

3. The clinic work is done by the Sedgwick County Medical Society in conjunction with its other clinics, which prevents abuse of clinic work.

4. Tuberculin testing programs will be carried out in such a way as to bring about the best cooperation between members of the Sedgwick County Medical Society and the school or health officials making such examinations. Adequate information will be furnished the profession in regard to and in advance of the tuberculin testing program.

The Sedgwick County Medical Society believes that this plan has the following advantages:

1. The tuberculosis work in the county is held under the direction of the Sedgwick County Medical Society working through its Tuberculosis Committee and working in cooperation with the county health officers and the Sedgwick County Tuberculosis Association.

2. The tuberculosis clinic is conducted by the Sedgwick County Medical Society in conjunction with its other clinics. The clinic work is limited to indigent patients.

3. The principle of sending full-pay and part-pay patients to their private physicians is safe-guarded.

4. This brings a cooperation between the members of the county medical society, the county health officers, and the Sedgwick County Tuberculosis Association and results in an advantage to each group concerned and prevents many misunderstandings which might arise were each body working independently.

5. This plan also recognizes the fact that there is a tuberculosis problem existing in which the public is very much interested, and this furnishes the lay public the leadership in this problem which should come from the medical profession.



---

## MEDICAL ECONOMICS

---

### THE DOCTOR HAS HEALTH FOR SALE

In years gone by the doctor was almost as impressive a signpost of pain, disease and death as was the undertaker. People dreaded to see him come into their homes and dreaded to go to his office and, as soon as the acute ache or illness of the moment was relieved, were glad to see him go and to forget him and their need for his services. Too much of these conditions remains today.

No man enjoys remembering unpleasant things. He instinctively (and very properly) turns his mind to the contemplation of stimulating and joyous experiences. Is it strange that he should tend to forget the doctor while he is trying to forget the suffering of his recent illness?

The advertising man (we do not mean the "quack" who lauds his own skill in the public prints, but the man who is engaged in the profession of advertising) knows that if you have something to sell you must make people want it before they will buy. It is his business to find out what are the most appealing features of the products his clients have for sale and then make those so attractive that people will stand in line awaiting their turns.

Sickness and death have no particular popular appeal. One does not apply to the undertaker ("mortician" seems to be a more popular word just now) until his services are absolutely required; and no amount of salesmanship would render a bargain-sale of coffins at all widely popular. Some doctors enjoy about the same type of popularity as the gentlemen to whom we have just alluded.

The laws of medical ethics forbid a physician to advertise his personal skill or knowledge in the newspapers and magazines, but we can see no harm in impersonal advertising for educational purposes, as well as for selling purposes.

Let us look over the doctor's stock and see what he had best present to his "customers."

His first commodity (that is, the one that most people think of first) is professional knowledge and skill for the alleviation of pain and illness and for the postponement of death. Medical ethics, however, forbids him to exploit these to prospective patients; and even if this were not true, popular imagination turns with distaste or even loathing from the thought of pain, illness, and death.

He has, also, a knowledge of hygiene and sanitation and all the various measures by which a man or

a community can *keep well*. Now here is something that interests everyone. Health is mankind's most prized possession, for without it all the other pleasures of life lose their zest and flavor.

While physicians differ in the extent of their knowledge of these matters and in their ability to apply that knowledge, they all have it to a considerable extent and can add to and develop it readily.

The only way we can treat disease in its incipency, or even before it starts, is by examining our patients at periodic intervals, and making a *real* job of such examinations. The only way we can convince them of the necessity of such examinations is by educating them concerning the supreme value of death and the possibility of maintaining it by a proper hygienic life and a reasonable (not a morbid or pathologic) interest in the condition of their bodies.

If your stock of knowledge and technic in the lines of general hygiene and physical diagnosis is low or out of date, get in some new goods so as to be ready for business, and then advertise the fact that you have *health for sale*.

If you use paid publicity, it must be impersonal and *should* be a cooperative proposition. The County Medical Society could properly run ads in the local papers calling attention to the priceless commodity which all the physicians in the county have for sale. No name should be signed to this—or the name of *every* member of the society should appear. It might be well to state casually that this is no money-making scheme, for, the more people buy this health service the less work will the doctors have in caring for the sick.

Equip yourself to make this a real and valuable service and charge fees in proportion to its value and your effort. People *ought* to be more willing to pay for being *kept* well than for being *made* well. Their condition of health would be a pleasant thing to remember.

This may sound academic and visionary, but the time is coming—and it is not so far away, we believe—when this educational health service will be the most important part of the work of physicians.

Be prepared; be happy and *look* so; forget disease as much as you can and encourage your patients to do the same. Have health for sale and boost it as a good salesman should. So shall your days be long in the land and, verily, you shall prosper.—Clinical Medicine and Surgery.

---

### MEDICAL SOCIETIES

Of course, we all belong to our County and State Medical Societies, and to the American Medical

Association. These are things which are expected of every active and ethical physician. Does the question ever arise in any of our minds whether we are getting our money's worth for what we spend in dues in these various societies?

If we are not getting anything, or very little, out of our medical societies, the reason is not far to seek: it is because we are putting nothing into them. You can't get anything out of a jug (or a medical society) that hasn't first been put into it.

Sit down quietly for a few minutes and ask yourself some questions, and answer them honestly.

What kind of a County Society would we have if every member made exactly as much effort as I make to see that its meetings are a success?

How successful would the meetings of the State Society and the A.M.A. be if every member attended them as regularly as I do, and contributed as freely to the discussions as I contribute?

How much fraternal spirit and coordinate effort would there be in the profession if every member of it were as friendly and helpful and as good a cooperator as I am?

If you say to yourself that you are never asked to read a paper before any of the societies, do you ever stop to wonder why that is? There is a reason for everything that occurs in this world. Let's look for this one.

The officers of the County Society are desirous of preparing programs which will interest the members. They go earnestly over their lists to find those who have something to say. The man whose profession is nothing more than a means for earning his daily bread rarely has any overflow of energy to give his confreres. Your county secretary is looking for the fellows who bubble over with an enthusiasm which is contagious; the men who study, who keep records of their cases, and who take an active part in the discussion of the papers which other doctors present. You cannot "hide a candle under a bushel," nor can an enthusiastic and well-informed man remain in obscurity in any professional gathering.

Here is the formula for getting abundant returns on your society memberships:

First, you must be not merely contented with your profession, but you must take an active pride and joy in it.

Keep posted on the new developments along the lines in which you are especially interested. Get a medical hobby and ride it hard, being prepared to

accept the falls which your confreres will take out of you, and keeping yourself "loaded" to answer their questions and arguments.

When you receive the program of the next county meeting, look over the subjects which are to be presented and then get down your textbooks and read them up so that you will be prepared to discuss them intelligently.

If you do this regularly, it will add greatly to the interest of the meetings, and points will be brought out which will be vastly helpful to you; moreover, you will soon gain the reputation of being a well-posted man and will be asked to present papers before the society.

When you have a paper to prepare, do it thoroughly. Go over your cases for material which will illustrate the points you want to bring out; consult the textbooks; go over your paper with the A.M.A. "Style Book" and get it into sound and attractive literary form; if your reference library is not so extensive as you could wish, here is a place where we can help you. We have a large reference library, and will be glad to look up matters for you and give you a list of articles on your subject.

After you have given the society a paper which is up to the minute and full of practical information, publish it. Here is another place where we can help you. We are eagerly looking for snappy, readable, usable articles for Clinical Medicine and Surgery.

If, after all your efforts, the literary form and style of your article are not all you could desire, but it contains valuable ideas, we will dress it up for you, within reason.

The only ethical way in which a physician can advertise is by writing articles for the medical journals. If your published communications are original and well presented, the authorities of the State Society will eventually find you out and your field of usefulness will become enlarged.

Follow out these ideas, consistently and regularly, year after year, and you will find that there are no limits to your progress except those you set for yourself.

Remember, you have to put something into a bottle (or a society meeting) before you can take anything out; and the more you put in, the more you can take out. Remember, also, that if you have more stuff than your present bottle will hold, you are sure to be provided with a larger bottle.—Clinical Medicine and Surgery.



---

## NEWS NOTES

---

### HALLS OF HEALTH

In accordance with the instruction given by the House of Delegates of the Society, the Kansas delegates to the American Medical Association introduced the following resolution in the House of Delegates of that body:

WHEREAS, The successful handling of halls of health and similar exhibits by various state and county medical societies has seemingly demonstrated a vast amount of public interest in activities of this kind; and

WHEREAS, It is believed that visual lay education depicting the progress of modern medicine, the service it is able to offer and the ways and means in which the public may take advantage of that service affords one of the best means for the medical profession to reply to the charges of its present critics; and

WHEREAS, It is further believed that many public agencies, medical schools, boards of health, medical supply concerns and other institutions allied with the practice of medicine would be willing to cooperate with the American Medical Association in the presentation of extensive, efficient and helpful exhibits of this kind; be it therefore

*Resolved*, That The Kansas Medical Society does hereby suggest and recommend to the American Medical Association that it establish a traveling Hall of Health, including exhibits of all kinds pertaining to public health and the practice of medicine, for display in all parts of the country under cosponsorship with the constituent state associations.

Approved by the House of Delegates of The Kansas Medical Society in annual session on June 12, 1938.

The resolution was referred to the Reference Committee on Hygiene and Public Health and was approved by that Committee and forwarded for future consideration by the Board of Trustees.

The Kansas medical profession having had experience with one of several medical society Halls of Health held to date believes there is much merit in the above suggestion in the event that the obvious financial and mechanical difficulties incidental to a traveling Hall of Health can be solved.

Interest in the Sedgwick County Medical Society Hall of Health presented in conjunction with the last Annual Session of the Society, was consistent throughout the ten-day period during which the event was held and at which there was an estimated attendance of 30,000 persons. It was gratifying to note the genuine interest of all classes and ages in the ethical and scientific messages portrayed by the various displays. Of added significance is the fact that Sedgwick County Medical Society has found increased interest in health subjects and their ethical aspects since the exhibit closed and the fact that the exposition is still talked about by many who visited it.

Of outstanding interest to any Hall of Health would be the famous Camp Transparent Woman, owned by Mr. S. H. Camp of Jackson, Michigan, and which was the central theme of the Wichita exhibit. The interesting nature of this display and the easily understood lectures accompanying its demonstration undoubtedly portrayed to the laity the most graphic description of anatomy. A

traveling Hall of Health including numerous exhibits of this kind could become an excellent contribution to the extensive and efficient methods of lay education now conducted by the medical profession.

---

### OSTEOPATHS

Judge Richard L. Hopkins, of the United States District Court, on June 30 dissolved a temporary restraining order which has been in effect since June 29, 1937, and which instructed the Collector of Internal Revenue to continue issuing narcotic permits to Kansas osteopaths until their rights to dispense and administer drugs had been determined by the Kansas Supreme Court. Dissolution of this order seems to indicate that the former ruling of the narcotic division to the effect that osteopaths may not secure narcotic permits in Kansas will immediately go into effect and that effective last June 30 those practitioners are not entitled to have narcotic drugs in their possession.

In the case of State vs. Gleason, Mr. W. H. Vernon and Mr. Frank McFarland, attorneys for the defendant, recently filed application for additional time to file a motion for rehearing of the case. As is customary in instances of this kind, the Court granted an extension of time until July 30 for preparation of this motion. A hearing of the motion will probably be heard at the next term of the Court.

---

### COUNCIL MEETING

A joint meeting of the Council and the Committee on Public Policy was held at the Hotel Allis in Wichita on July 10.

A report of the meeting will be contained in the next issue of the Journal.

---

### INDIGENT REPORT

The Medical Economics Committee forwarded on June 21 a bulletin to the presidents and secretaries of the county medical societies and to the official representatives describing and enclosing copies of a report on Kansas indigent medical care recently published by the State Board of Social Welfare.

The report which was prepared by a committee of county commissioners, county welfare directors, and physicians, contains the following recommendations:

"Resolved that in the opinion of this committee the most feasible and desirable county plan for supplying medical care to public assistance recipients is by means of a contract between the county board of social welfare and the members of the county medical society organization, collectively or individually; the physicians included in the contract to be compensated for their services on a lump sum or controlled fee schedule basis by the county board of social welfare."

"Resolved that in the opinion of this committee the effectiveness of any county medical plan or program can be increased by the establishment of a committee of physicians selected by the medical society which can function as a liaison committee between the county board of social welfare and the physicians practicing medicine within the county."

The Committee on Medical Economics has suggested in the above bulletin that the physicians in each county hold an early meeting to discuss the report and the recom-

# PARKE-DAVIS THEELIN AND KAPSEALS THEELOL

Theelin, introduced to the medical profession in January, 1931, by Parke, Davis & Company, marked a new phase in endocrine therapy. This active estrogenic substance was isolated and identified both chemically and pharmacologically by Dr. E. A. Doisy of St. Louis University. Subsequently Dr. Doisy isolated Theelol, a related product. The further development of these two preparations for clinical application was carried out through cooperative work on the part of the staffs of the Research Laboratory and the Department of Experimental Medicine of Parke, Davis & Company.

Theelin (ketohydroxyestratriene) for intramuscular administration, and Theelol (trihydroxyestratriene) for oral use, are chemically pure estrogenic substances rigidly standardized by physiological and chemical methods. To facilitate proper dosage, the following package forms are available:

## FOR INTRAMUSCULAR ADMINISTRATION

### THEELIN (AQUEOUS) AMPOULES

0.02 mg.—200 international units  
(Ampoule No. 167)

### THEELIN IN OIL AMPOULES

0.1 mg.—1000 international units  
(Ampoule No. 178)

### THEELIN IN OIL AMPOULES

0.2 mg.—2000 international units  
(Ampoule No. 179)

### THEELIN IN OIL AMPOULES

1.0 mg.—10,000 international units  
(Ampoule No. 182)

*Supplied in boxes of six and fifty 1-cc. ampoules.*

## FOR VAGINAL ADMINISTRATION

### THEELIN VAGINAL SUPPOSITORIES

0.2 mg.—2000 international units

*Supplied in boxes of six suppositories.*

## FOR ORAL ADMINISTRATION

### KAPSEALS THEELOL

0.06 mg. (No. 353)

### KAPSEALS THEELOL

0.12 mg. (No. 358)

*Supplied in bottles of 20, 100 and 250.*

Descriptive literature, discussing these products in detail, is available on request.

*The World's Largest Makers of Pharmaceutical and Biological Products*

# PARKE, DAVIS & COMPANY

DETROIT



MICHIGAN



mentations. It is believed that the study will be of material aid to those counties which desire new or more efficient methods for provision of indigent medical care.

### APPOINTMENTS

Governor Walter A. Huxman recently announced the following appointments:

Kansas State Board of Regents, Dr. L. J. Beyer, Lyons, term of four years.

Kansas State Board of Medical Registration and Examination, Dr. C. E. Joss, Topeka, and Dr. J. A. Wheeler, Newton, each for a term of three years.

Kansas State Board of Health, Dr. R. T. Nichols, Hiawatha, Dr. B. Anderson, Victoria, and Mr. Howard Rooney, Dodge City, each for a term of three years.

### STATE BOARD OF HEALTH

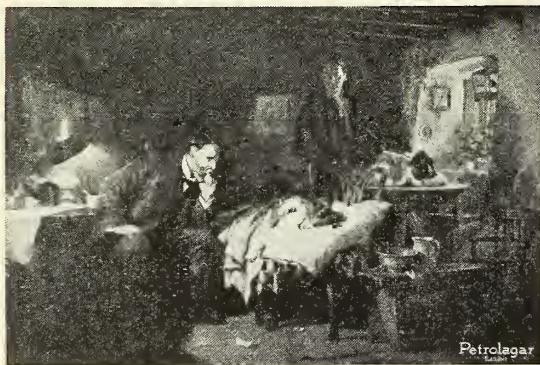
The Kansas State Board of Health recently moved the child hygiene division, of which H. R. Ross, M. D., is director, and the state public health laboratory, which is under the direction of Charles A. Hunter, Ph. D., to the second floor of the building at 933 Kansas Avenue. The new quarters were remodeled, and give much-needed space and convenience.

### THE DOCTOR NOW IN A PERMANENT HOME

#### SCULPTICOLOR OF FILDES' MASTERPIECE GOES TO ROSENWALD MUSEUM

The \$150,000 reproduction of the Sir Luke Fildes masterpiece "The Doctor" first shown by the Petrolagar Laboratories at Chicago's Century of Progress Exposition in 1933, was recently presented by its owners to the new Rosenwald Museum of Science and Industry in that city.

Following the two World's Fairs, "The Doctor" Exhibit



went on a tour of 50,000 miles and was viewed by over five million people in eighteen principal cities throughout the country.

Designed to remind the public of the importance of the family physician, it required the full time of the late Chicago sculptor, John Paulding and the noted artist Rudolph Ingerle and a large corps of assistants, and took nearly a year to complete.

In its new location in the Rosenwald Museum it will be seen by millions of visitors annually.

### ARMY MEDICAL LIBRARY

A measure of interest to the medical profession was the passage of a bill by Congress wherein the Army Medical Library will in the future be transferred from its present unsafe and inadequate location to a newly constructed and modern fire proof building of its own.

The Society, in cooperation with the American Medical Association, wrote each member of the Kansas delegation in Congress asking support of the measure. Letters were received from all these Representatives and Senators stating that they would be happy to give their consideration or assistance.

### BLIND PPROGRAM

The Division for the Blind of the State Board of Social Welfare of Kansas announced on June 30, that as of that date, 1207 applicants for blind assistance have been examined by physicians for certification as to blindness and that 889 of this number have to date been approved to receive financial aid. It is probable that an additional number of the above number will also be approved.

The medical and surgical treatment program for blind assistance clients has recently become effective in each county of the state, and to date forty-seven persons have been approved for medical services under this program.

Miss Elizabeth Snyder, R. N., assistant to Dr. C. J. Mullen, Kansas City, State Ophthalmologist, has been assigned to field work at the request of Dr. Mullen and the Society Committee on Conservation of Eyesight, to aid county welfare boards and physicians in the conduct of the treatment program.

### A. M. A. SURVEY

The Committee on Medical Economics will hold a meeting within the next several weeks to prepare plans for Kansas participation in the Medical Economics Survey of the United States being conducted by the American Medical Association.

The survey consists of various questionnaires pertaining to all forms of medical and public health services which are to be completed by state medical societies, county medical societies, hospitals, state institutions and various other agencies. It is planned that the reports received from the various states will be compiled into a national report for the information of all groups interested in public health and medical services.

### A. M. A. MEETING

The San Francisco session of the American Medical Association was generally believed to have been one of the most successful the Association has ever held. Registration of the meeting totaled 6,034 physicians; the technical and scientific exhibits were among the largest in the history of the organization; and the usual number of excellent scientific papers were presented.

New officers elected at the meeting were as follows:

President-Elect, Dr. Rock Sleyster, of Wauwatosa, Wisconsin; Vice President, Dr. Howard Morrow, San Francisco; Secretary, Dr. Olin West, Chicago; Treasurer, Dr. Herman L. Kretschmer, Chicago, Illinois; Speaker of the House of Delegates, Dr. Harrison H. Shoulders, Nashville, Tennessee; Vice Speaker of the House of Delegates, Dr. Roy

# RADIUM

## —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

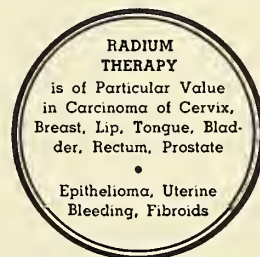
*The complete service for Radium users*

For details, address

**RADIUM AND RADON CORPORATION**

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO



# Dilaudid hydrochloride

COUNCIL ACCEPTED

## For Relief of Pain

When an opiate is required Dilaudid acts more quickly and with fewer side effects. Dilaudid may be used orally, rectally or hypodermically.

Dilaudid hydrochloride (dihydromorphinone hydrochloride).  
Dilaudid Trade Mark reg. U. S. Pat. Off.



**BILHUBER-KNOLL CORP.** 154 OGDEN AVE., JERSEY CITY, N.J.



W. Fouts, Omaha, Nebraska; Trustees, Dr. Austin A. Hayden, Chicago, Illinois, and Dr. Charles B. Wright, Minneapolis, Minnesota.

An interesting occurrence in connection with the election of officers was the fact, that except for a friendly contest for the office of Vice Speaker, all of the new officers were nominated and elected without opposition.

A new By-Law adopted at the last session became effective this year wherein meeting places for the Annual Session of the organization will be selected three years in advance in order to permit more time for arrangements of facilities. In compliance with this amendment, the San Francisco House of Delegates selected St. Louis, New York and Cleveland for the 1939, 1940, and 1941 meetings respectively.

It is believed that no abstract report can adequately describe a meeting of the House of Delegates of the American Medical Association and for this reason all members are urged to read the account of official proceedings contained in the July 2 issue of the Journal of the American Medical Association page 31-64. The following excerpts are taken from that report:

Address of Dr. N. B. Van Etten, Speaker of the House of Delegates:

"You elect the officers and trustees and they report to you. They do not originate policy. You make the policies, and the officers and trustees are obligated to execute them. If your policies are not carried out to your satisfaction, you may replace your officers. On your shoulders rests the fate of American medicine. Every practitioner of medicine looks to you, and back of these practitioners are millions of people who are daily looking for the best in medical care, not merely adequate care of just any medical care that may be promised by paternalistic bureaus, but a constantly improving medical care that a constantly improving medical profession may offer them.

"There can be no autocracy where final decisions rest within a house composed of 175 delegates. There is no dictator among your officers. There is no dictator among the trustees to whom you delegate the care of your money. There is no policy which you may not reverse. You have the power and you have the responsibility. As delegates from constituent bodies it is your duty to report the action of this house to your membership.

"If this great Association is unresponsive to the will of its membership, remember that you may have failed to bring the thought of your constituents to this forum. This is a great association. The Scientific Assembly became so large that you divided it into sixteen sections, where every specialty may be discussed in the best possible manner and where there is ample opportunity for the voice of modern medicine. Other medical societies employ different technics. It is within your province to develop other models if you wish. Your Judicial Council, your Council on Medical Education and Hospitals and your Council on Scientific Assembly are standing committees of the Association and they report to you."

Address of Dr. J. H. J. Upham, President:

"A second impression is of the awakened interest of our membership in the present social and economic questions confronting the country as a whole and especially those connected with present day medical practice. Ten years ago the average practitioner accepted the care of the indigent as a professional duty and an accepted duty. The great depression, however, made this burden too great to be carried further by

our profession alone and forced collective thinking of ways and means of meeting the situation. In every state and in almost every county the various phases of this problem are being discussed. The best thought of our members is being given to meeting the difficulties in their respective areas. Furthermore, it is my distinct feeling that the activities manifested are not the result of fear of the imposition of any European scheme of socialized practice but rather an aroused consciousness of the part organized medicine should play in seeking to solve the present economic problems in relation to illness. Allied to this is the manifest determination to preserve the individual type of medical practice as that best suited to this country, and, to maintain that practice on the highest possible plane.

"In the current efforts to secure definite and country-wide information as to needs of medical care and the supply at present existing in every community, the American Medical Association has assumed a leadership in constructive thought that is a noteworthy contribution. When the basic facts are established a long step will have been taken in the direction of solving some of these many grave problems. One concrete evidence of this arousing of the members of our profession, and in their feeling that our greatest hopes lie in a united profession, is the remarkable increase in membership of this Association. The latest report shows 109,435 active members. This is our emphatic response to the press reports of dissension in our organization."

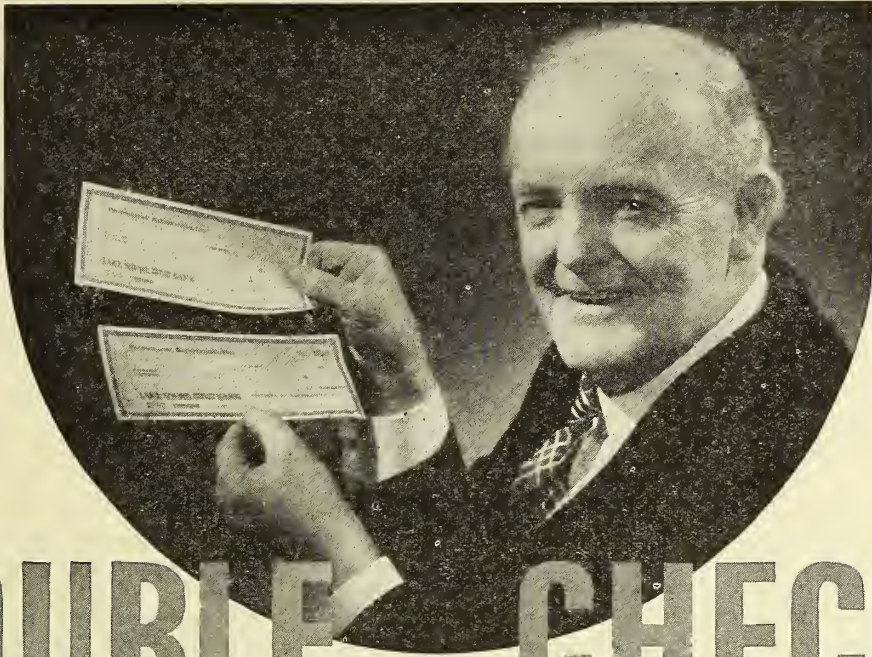
Address of Dr. Irvin Abell, President-Elect:

"As your President-Elect it has been my duty and my privilege to attend the deliberations of your Board of Trustees and many of the district and state association meetings throughout the country. The most lasting impression I have gained from these wide spread contacts is the sincere desire of the members of the American Medical Association to preserve our system of medical care and at the same time to make its benefits available to all classes of our population. Differences of opinion there have been and will continue to be as to the best method of accomplishing the latter aim, but I have found nowhere basis for the unwarranted accusation that organized medicine as a whole is static and obstructive. True it has opposed, does now oppose and will continue to oppose proposals that tend to lower the standard which it has set on medical service; namely, that it be good medical service. By no possible deduction can this be interpreted as a selfish action, one that would inure to our own aggrandizement. By tradition and heritage we are committed to the principle that the sole reason for the existence of our profession is the service it can render the people of this country consists not only in healing the sick and preventing disease but in preserving that system of practice, evolved through years of studious and unselfish effort, which has given to the people of the United States the lowest morbidity and mortality rates of any country in the world."

Dr. H. L. Snyder, Winfield, presented the following resolution which was referred to the Reference Committee on Hygiene and Public Health and which was approved by that committee for suggestion to the Board of Trustees:

WHEREAS, The successful handling of halls of health and similar exhibits by various state and county medical societies has seemingly demonstrated a vast amount of public interest in activities of this kind; and

WHEREAS, It is believed that visual lay education



# DOUBLE CHECK!

The hundreds of Doctors who receive frequent checks from EMPLOYERS MUTUAL for their treatment of compensation cases, can receive additional checks when they carry their own insurance with EMPLOYERS MUTUAL. For this strong Mutual Company pays substantial dividends on Workmen's Compensation, Public Liability, Automobile, Fire, and allied forms of Insurance. Because EMPLOYERS MUTUAL is operated for the benefit of its policyholders, every effort is made to maintain a high standard

of service, maximum safety, and rigid economy. Its policyholders benefit accordingly. You, as a Doctor, know that EMPLOYERS MUTUAL pays its claims promptly, that it adjusts claims fairly, and that it chooses its risks carefully. It will be a profitable move for you to place your Casualty and Fire Insurance problems in the hands of this reliable Company. A letter or phone call to any branch office (or the Home Office) will bring a sincere, capable company representative to your office to help you with any insurance problem.

EMPLOYERS MUTUAL  
LIABILITY INSURANCE CO.

*Employers  
Mutuals*

EMPLOYERS MUTUAL  
FIRE INSURANCE CO.

*Automobile, Public Liability, Workmen's Compensation  
Plate Glass, Burglary, Fire and Tornado Insurance*

HOME OFFICE: WAUSAU, WISCONSIN

**WICHITA: 914 UNION NATIONAL BLDG.**

*Branch Offices and Resident Representatives throughout the Middle West  
Consult Your Local Telephone Directory*



depicting the progress of modern medicine, the service it is able to offer and the ways and means in which the public may take advantage of that service affords one of the best means for the medical profession to reply to the charges of its present critics; and

WHEREAS, It is further believed that many public agencies, medical schools, boards of health, medical supply concerns and other institutions allied with the practice of medicine would be willing to cooperate with the American Medical Association in the presentation of extensive, efficient and helpful exhibits of this kind; be it therefore

*Resolved*, That The Kansas Medical Society does hereby suggest and recommend to the American Medical Association that it establish a traveling Hall of Health, including exhibits of all kinds pertaining to public health and the practice of medicine, for display in all parts of the country under cosponsorship with the constituent state associations.

Approved by the House of Delegates of The Kansas Medical Society in annual session on June 12, 1938.

Other resolutions introduced and referred to reference committees were:

Resolution on Sulfanilamide.

Resolution Requesting Reconsideration by the Council on Foods of Establishment of Suitable Standards for the Acceptance of Butter.

Recommendations for Establishment of Council on Medical Care.

Resolutions Requesting Council on Foods to Change Its Policy with Respect to the Consideration and Acceptance of Butter.

Resolutions Requesting the Council on Medical Education and Hospitals to Study the Status of Clinical and Pathologic Laboratories and Other Departments in Hospitals.

Resolution on Motion Picture "Birth of a Baby".

Resolution on Fee Schedules.

Resolution on Revision of Principles of Medical Ethics.

Resolution on Recognition of Acting Assistant Surgeons of the Spanish American War.

Resolutions on Controlled Animal Experimentation.

Resolution on Hospital Insurance.

Resolution Requiring of Foreign Graduates Full Citizenship in the United States.

Resolution on Rockefeller Cancer Control Fund.

Resolution on Program of Public Relations.

Resolution on Standards for the Practice of Medicine in Hospitals.

Resolution on Teaching in Schools of Chiropractic.

Resolution on Services of Section Delegates.

Resolution Dealing with Alcoholic Intoxication.

Resolution Approving in Principle the Indiana Plan of Health Education and Preventive Medicine.

Resolution on Visual Standards for Operating Motor Vehicles, from the Section on Ophthalmology.

Resolutions from the Section on Nervous and Mental Diseases Recommending Alteration of Existing Laws Relative to Contraceptive Information.

Resolutions on Status and Future of Army Medical Library and Museum.

An address prepared by Miss Josephine Roche, Chairman of the Interdepartment Committee to Co-ordinate Health and Welfare Activities of the Federal Government, and presented in her absence by Dr. Warren F. Draper of the United States Public Health Service:

"The overwhelming central fact established by the national health survey is this; that with poverty goes not only a higher rate of sickness but a deficiency of

medical care. These correlations were proved not only for the relief group but for struggling families above the level of relief. Many may have considered these facts too obvious to require proof, and certainly they had been supported by innumerable smaller studies. But never before had such a mountain of evidence been assembled to sustain the conclusion that among the poor there is an excess of sickness and death which requires preventive services and medical care proportionately greater than are required in the higher income groups. And never before had it been so convincingly shown that in many areas and localities those economic groups which are most in need of preventive services and medical care are receiving far less of both than are families with larger individual financial resources.

"Together with you, those of us who have been battling on the economic front against unemployment, starvation wages, indecent housing and utterly inadequate food find nothing new, but only shocking confirmation of the extent to which human and economic waste has been permitted to go on, when we read from the Technical Committee's report on The Need for a National Health Program such facts as the following: On an average day of the year, there are four million or more persons disabled by illness. Every year seventy million sick persons lose over one billion days from work or customary activities. In 1936, nearly a quarter of a million women did not have the advantage of a physician's care at delivery; 15,000 of these were delivered by neighbors or relatives; 223,000 were delivered by midwives, most of whom are untrained and ignorant.

"No one formula or program can passably be found adequate to meet the varied needs, but a composite of many efforts and plans, some already tested, some in experimental stages, some not yet under way, can and must be found. We believe that, by providing an opportunity for an interchange of views between representatives of the medical and other professions, of various agencies and of the general public, the National Health Conference will dissipate misunderstandings and work toward a meeting of minds on the beginning of a coordinated national health program.

"That there will be concerted public action eventually for such a program no one measuring the human needs and denials can doubt. In this great democracy with its unsurpassed resources and potentialities for human progress, one third of our people are not going indefinitely to remain ill fed, ill housed, ill cared for in sickness. Already they are on the march, and the only question which remains is whether highly specialized groups, experienced and trained in ways and means of meeting human needs, are going courageously and quickly to offer all they can give in constructive and progressive leadership and help in the meeting of the vast human problems of today.

"You have your instruments of precision for diagnosis and treatment; your technics for prevention and cure are among the wonders of the modern world. How can we help to bring them to all our people who need them? That is the question which we submit to you today, the question we shall ask at our conference, must go on asking until we find the answer."

Another fact of interest to Kansas members was the appointment of Dr. J. F. Hassig, Kansas City, as a member of the Reference Committee on Hygiene and Public Health.

# Behind MERCUROCHROME

(dibrom-oxymercuri-fluorescein-sodium)



*is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

**Hynson, Westcott & Dunning, Inc.**  
BALTIMORE, MARYLAND

FOR

PRESTIGE—PROFITS  
& PROSPERITY

SUGGEST

WILS-EDGE MOUNTINGS

More Sincerely

**QUINTON-DUFFENS**  
OPTICAL COMPANY

*Your Local Independent Wholesaler*

Topeka

Hutchinson

Salina



## NEUROLOGICAL HOSPITAL

Twenty-Seventh and The Paseo  
Kansas City, Missouri

Modern Hospitalization of  
Nervous and Mental Ill-  
nesses, Alcoholism and  
Drug Addiction.

## THE ROBINSON CLINIC

G. WILSE ROBINSON, M.D.

G. WILSE ROBINSON, JR., M.D.



## THE W. E. ISLE COMPANY

1121 Grand Ave.  
Kansas City, Mo.

2nd Floor  
Victor 2350

COMFORT  
CORRECT POSTURE  
SATISFACTION  
ON  
ISLE-BUILT LIMBS

**Copper Engraving  
Company**  
*Artists Engravers*  
FOURTH FLOOR CAPPER BLDG.  
Topeka Kansas



Send us your photo for portrait cut.  
Or for other plate needs.



The following members from Kansas attended the meeting:

W. L. Anderson, M. D., Atchison; C. D. Blake, M. D., Hays; F. E. Coffey, M. D., Hays; D. V. Conwell, M. D., Halstead; F. L. Dennis, Dodge City; L. C. Edmonds, M. D., Horton; E. T. Gertson, M. D., Atwood; J. F. Hassig, M. D., Kansas City; R. S. Haury, M. D., Newton; C. A. Hellwig, M. D., Wichita; J. L. Kleinheksel, M. D., Wichita; C. J. Kurth, M. D., Halstead; H. E. Marshall, M. D., Wichita; Karl Menninger, M. D., Topeka; R. T. Nichols, M. D., Hiawatha; E. J. Nodurft, M. D., Wichita; A. A. Olson, M. D., Wichita; P. A. Pettitt, M. D., Paola; E. A. Pickens, Wichita; F. T. Renick, M. D., Lawrence; H. L. Snyder, M. D., Winfield; Maurice Snyder, M. D., Salina; C. C. Tucker, M. D., Wichita; F. N. White, Russell; C. E. Yates, M. D., Lawrence; C. L. Young, M. D., Kansas City and J. W. Young, M. D., Kansas City.

### THE ANNUAL A. P. H. A. MEETING

The sixty-seventh annual meeting of the American Public Health Association will be held in Kansas City, Missouri, October 25-28, offering an opportunity for public health workers, physicians in private practice and lay persons interested in public health, to attend a conference of exceptional interest.

A few of the widely known persons who will appear on the program are: Dr. Earle G. Brown, Colonel A. Parker Hitchens, Dr. Haven Emerson, Dr. Thomas Parran Jr., Mr. Joel I. Connolly, Dr. Nina Simmonds, Dr. Karl F. Meyer, Dr. Walter Clarke, Professor C. E. A. Winslow, Dr. George C. Ruhland, Dr. William A. Sawyer, Dr. Walter H. Eddy, Dr. Frank G. Boudreau, Mr. Sol Pincus, Dr. Martha M. Eliot, Dr. Abel Wolman, Dr. Robert S. Breed and Dr. Felix J. Underwood.

Fifty morning and afternoon meetings have been arranged by the ten sections of the Association, including: Health Officers, Laboratory, Vital Statistics, Public Health Engineering, Industrial Hygiene, Food and Nutrition, Child Hygiene, Public Health Education, Public Health Nursing and Epidemiology.

There will be special sessions on "Public Health Aspects of Medical Care", "Oral Hygiene", "Professional Education", and "Diphtheria Immunization".

A public meeting, under the auspices of the local committee, will be held Wednesday evening, October 26, with Dr. E. V. McCollum discussing "Milk Pasteurization", and Dr. Arthur T. McCormack having as his subject, "New Responsibilities of the Health Officer".

More than 300 papers and committee reports will be presented during the four-day meeting, covering the subject of modern public health practice in the United States.

All of the meetings will be held in the Kansas City Municipal Auditorium, where there will also be an interesting and instructive display of exhibits.

This meeting should draw thousands of middle-westerners who are interested in public health, as well as health officers from all over the nation.

### LOCATION

Information has been received by the central office that there is no physician at present at Westphalia, Kansas, and that this is a location of unusual opportunity.

Additional information may be obtained from Dr. J. R. Henning formerly of Westphalia and now located in Ottawa.

### SYPHILIS PAMPHLET

The Division of Venereal Disease of the United States Public Health Service has recently published a pamphlet for lay use entitled "Syphilis, its cause, its spread, its cure".

A letter issued by Dr. R. A. Vonderlehr, Assistant Surgeon General to the General, contains the following explanation of the purpose of the pamphlet:

"Foremost among the problems which face the physician in his treatment of syphilis is that of keeping the patient in treatment. When skin lesions disappear and the patient 'feels fine' he is apt to disregard the doctor's advice and lapse.

The first line of defense against such lapses is education. When the patient thoroughly understands his disease—as the diabetic is taught the idiosyncracies of his diet—he may be more often counted upon to continue through that long course of seventy injections recommended by the Cooperative Clinical Group.

The little folder which we enclose was prepared with the physician's problem in mind.

It is clear. We tried it on patients at a city clinic, on a workers education group, on a grade school age group, on college students. We revised it until it answered their questions in a way they would understand. Then we added the pictures to help drive home the story.

It is inexpensive. It may be secured from the Superintendent of Documents in Washington, D. C., for \$1.00 per 100 copies or in smaller quantity for five cents each. But give one to each patient on the occasion of his first visit and it should save many cases for many treatments."

### POSTGRADUATE COURSE

A series of postgraduate courses, financed with funds available under the Social Security Act and sponsored by the Kansas State Board of Health with cooperation from the Society Committee on Maternal and Child Welfare and the Extension Division of the University of Kansas, commenced in the south central and southeast areas of the state on June 27.

Speakers for the south central course are Dr. H. C. Hesseltine and Dr. Wm. J. Dieckmann, from the Department of Obstetrics of the University of Chicago, each serving two weeks; and Dr. J. D. Boyd, from the Department of Pediatrics of the University of Iowa. Those for the southeast area are Dr. Frank Whitacre and Dr. Carl Huber, assistant professors of obstetrics, University of Chicago, each serving two weeks; and Dr. W. W. Swanson, associate professor of pediatrics, University of Chicago.

Meetings of the southcentral area are at Great Bend, St. Rose Hospital, June 27, July 4, 11, 18; Pratt, Municipal Building, June 28, July 5, 12, 19; Wellington, Harry's Cafe, June 29, July 6, 13, 20; Hutchinson, Chamber of Commerce Rooms, June 30, July 7, 14, 21; McPherson, McPherson County Hospital, July 1, 8, 15, 22.

Meetings of the southeast area are at Emporia, Newman Memorial Hospital, June 27, July 4, 11, 18; ElDorado, Susan B. Allen Hospital, June 28, July 5, 12, 19; Independence, Mercy Hospital, June 29, July 6, 13, 20; Pittsburg, Hotel Stilwell, June 30, July 7, 14, 21; Iola, Kelley Hotel, July 1, 8, 15, 22.

Hours of meeting are from 5:00 p.m. to 7:00 p.m. and 8:00 p.m. to 10:00 p.m.





## A STUDY FOR THE DOCTOR

A STUDY of the subject of irritation of the nose and throat due to smoking has been reported in the pages of a scientific journal. It describes the method for evaluating the irritant properties of cigarette smoke and the results obtained.

*This study shows conclusively that cigarettes made by the Philip Morris method of manufacture are definitely less irritating.*

Reprints\* of this and other articles on the subject of irritation due to smoking will be sent on request.

*Tune in to "JOHNNY PRESENTS" on the air Coast-to-Coast Tuesday evenings, NBC Network... Saturday evenings, CBS Network... Johnny presents "What's My Name" Friday Evenings—Mutual Network*

### PHILIP MORRIS & CO.

PHILIP MORRIS & CO. LTD., INC., 119 FIFTH AVE., NEW YORK

\*Please send me reprints of papers from

Proc. Soc. Exp. Biol. and Med., 1934 ☐ N. Y. State Jour. Med., 1935, ☐  
32, 241-245 35-No. 11, 590

Laryngoscope, 1935, XLV, 149-154 ☐ Laryngoscope, 1937, XLVII, 58-60 ☐

SIGNED: \_\_\_\_\_ M. D.  
(Please write name plainly)

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

KAN.



Much encouragement was received from the three similar courses previously held in other parts of the state and it is believed that every physician accessible to the above locations will feel amply repaid for time given in attending this event. The scientific material presented consists of a brief but complete symposium on all matters pertaining to maternal and child welfare.

### ANNOUNCEMENT

Dr. Hermon S. Major announces that Dr. Henry S. Millett is associated with him in The Major Clinic at 3100 Euclid Avenue, Kansas City, Missouri.

Dr. Millett received his degree of Doctor of Medicine at the University of Kansas in 1928, interned at the Kansas City General Hospital in 1928 and 1929 and was engaged in the general practice of medicine in Kansas City, Missouri from 1929 to 1930. Following this, he was associated with Dr. T. Klingman in neurology and psychiatry at the Mercywood Sanitarium and St. Joseph Hospital at Ann Arbor, Michigan, from September, 1930 to March, 1932. Later he was Resident in Neurology at the Neurological Institute, New York City from March, 1932 to March, 1934, Assistant in Neurology at Columbia University from March, 1932 to June 1935 and at the same time neuropathology at Columbia University from September, 1933 until March, 1934, Assistant in Neurology at New York University, New York City on the neurological wards of Bellevue Hospital from March, 1934 to May, 1938, Assistant Physician at Brooklyn State Hospital from March, 1934 until May, 1938 and Instructor and Assistant Clinical Professor of neurology at the Long Island College Medical School, Brooklyn, New York from September, 1936 until May, 1938. Dr. Millett is a Lieutenant in the United States Naval Reserve and is a member of the Metropolitan Psychiatric Society, New York City.

### DEATH NOTICES

Dr. J. Harvey Staatz, 64 years of age, died at his home in Bushton in June. Dr. Staatz graduated from the Northwestern University Medical School, Chicago, Illinois, in 1900, and had practiced in Bushton for a number of years. He was a member of the Rice County Medical Society.

### COUNTY SOCIETIES

The Butler-Greenwood County Medical Society met June 10 in Eureka, Golf in the afternoon for the members was followed with a dinner. This scientific program was conducted in conjunction with the Women's Field Army for the Control of Cancer and Dr. C. H. Warfield, Wichita, was the guest speaker.

The Cowley County Medical Society unanimously approved a memorial resolution in honor of its late member, Dr. L. A. Jacobus at a meeting held in Winfield on April 21. A portion of the resolution is as follows:

"Dr. Jacobus pioneered in surgery. He with Dr. Emerson established our first hospital, assisted in its management and supervised the many details of the surgical sterilization and technique. He was a pioneer

in x-ray work, having been the first person to own an x-ray machine in this county".

"We regret the passing of this fine physician and surgeon and this fine friend. He shall not be forgotten but will continue to live in our memory".

"THEREFORE BE IT RESOLVED, by the Cowley County Medical Society, in meeting on this 21st day of April, 1938, that we are deeply grieved at the passing of Dr. L. A. Jacobus and express to his family our deepest sympathy".

Members of the Cowley County Medical Society met in Arkansas City on June 1 with Dr. C. H. Warfield and Dr. J. S. Hibbard of Wichita as the principal speakers on the scientific program.

Dr. C. O. Meredith, Emporia, spoke on "X-ray Pelvimetry" at a meeting of the Lyon County Medical Society held in Emporia on July 5.

Marion County Medical Society were hosts to members of the Marion County Bar Association at a dinner meeting on July 6 in Marion.

Dr. and Mrs. D. M. Diefendorf, Waterville, had as their guests members of the Marshall County Medical Society at a dinner in Waterville on June 16. Dr. A. Hertzler and Dr. George Westfall both of Halstead, were guest speakers at the meeting.

Members of the Pawnee County Medical Society entertained members of the Barton and Rush-Ness societies at a dinner meeting in Larned on June 6. Guest speakers were Dr. F. P. Helm, Topeka, Secretary of Kansas State Board of Health and Dr. Robert H. Riedel, also of the Board of Health.

Officers of the Sedgwick County Medical Society for 1939 were elected at a meeting of that organization held in Wichita on May 24. Those elected to serve are as follows: Dr. Fred J. McEwen, Wichita, President; Dr. H. W. Palmer, Wichita, vice president; Dr. A. L. Ashmore, Wichita, secretary; Dr. H. R. Hodson, Wichita, re-elected treasurer. Members of the board of directors were Dr. G. B. Morrison, Dr. R. A. West, and Dr. E. H. Terrill, all of Wichita.

Dr. Elmer L. Servinghaus, Madison, Wisconsin, spoke on "Endocrine Therapy in General Practice" at a meeting of the Shawnee County Medical Society held in Topeka on June 6.

The following officers of Southeast Kansas Medical Society were elected at a dinner-meeting of the society held in Pittsburg on June 21: Dr. W. G. Rinehart, Pittsburg, president; Dr. Cleo Bell, Pittsburg, secretary-treasurer. Dr. C. G. Leitch, Dr. L. J. Dixon, and Dr. E. H. Skinner, all of Kansas City were the guest speakers.

Dr. Graham Asher and Dr. Galen Tice of Kansas City were the speakers at a meeting of the TriCounty Medical Society held in Newton on June 6. Their subjects were "Hypertensive Heart Disease" and "X-Ray of the Gastro-Intestinal Tract" respectively.

### MEMBERS

Dr. A. W. Butcher formerly of Miltonvale, is now connected with the Mowery Clinic in Salina.

Dr. Henry A. Dykes, Wichita, has retired as chief medical officer of the Veterans Hospital in Wichita after

## Cook County Graduate School of Medicine

(In affiliation with Cook County Hospital)  
Incorporated not for profit.

### ANNOUNCES CONTINUOUS COURSES

**MEDICINE**—Special Courses during August including Electrocardiography and Heart Disease. Gastro-Enterology in August and October.

**SURGERY**—General Courses One, Two, Three and Six Months; Two Weeks Intensive Course in Surgical Technique with practice on living tissue; Clinical Course; Special Courses. Courses start every Monday.

**GYNECOLOGY**—One Month Personal Course starting August 22nd. Gynecological Pathology by Dr. Schiller starting July 25th. Two Weeks Course starting October 10th.

**OBSTETRICS**—Two Weeks Intensive Course starting October 24th. Informal Course starting every week.

**FRACTURES & TRAUMATIC SURGERY**—Informal Course every week; Intensive Formal Course starting October 10th.

**DERMATOLOGY & SYPHILOLOGY**—Two Weeks Special Course starting September 19th. Clinical Course starting every week.

**CYSTOSCOPY**—Ten day Practical Course rotary every two weeks.

**GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES EVERY WEEK.**

**TEACHING FACULTY—ATTENDING STAFF OF COOK COUNTY HOSPITAL**

Address: Registrar, 427 South Honore Street,  
Chicago, Illinois.



## REGULATION

Regulation of the daily program, especially diet and exercise, is beneficial to normal bowel movement and in some cases of constipation serves as sufficient treatment. Others require additional aid to facilitate regular evacuation . . . When an adjunct to diet and exercise is required, as it often is, Petrolagar provides a mild but effective treatment. Its miscible properties make it easier to take and more effective than plain mineral oil. Further, by softening the feces, Petrolagar induces large, well formed stools which are easy to evacuate. The five types of Petrolagar afford a choice of medication adaptable to the individual patient. Petrolagar Laboratories, Inc., 8134 McCormick Blvd., Chicago, Illinois.

## PROFESSIONAL PROTECTION



### A DOCTOR SAYS:

"Keeping me out of court, with the annoyance and loss of time which that would have entailed, naturally meant not a little to me and for this I am grateful. I am happy to commend all phases of your Company's attitude and actions."

THE

**MEDICAL PROTECTIVE COMPANY**

OF FORT WAYNE, INDIANA

**WHEATON, ILLINOIS**

*Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.*





serving seventeen years in that capacity. Dr. George E. Tooley will fill the vacancy created by Dr. Dykes' resignation.

Dr. E. S. Edgerton, Wichita, was elected president of the American Medical Golfing Association at the San Francisco meeting of the A. M. A.

Dr. J. F. Gsell, Wichita, was the author of an article on "Doctors Will Work" published in the April issue of the Journal of the Connecticut State Medical Society.

Dr. O. G. Hutchinson, formerly of Wichita, is now practicing in Marysville. Dr. Hutchinson is in charge of the eye, ear, nose and throat department of the Randall Hospital in that city.

The Kansas Government Journal for March contains an article describing the civic assistance Dr. G. A. Leslie of McDonald has rendered his city as mayor and his county as representative.

Dr. O. P. Davis and Dr. W. L. Warriner both of Topeka were the honored guests at a banquet given by the Shawnee County Medical Society in Topeka on May 7, for their forty years of service to the medical profession.

Dr. E. N. Robertson, Concordia, was elected president of the Kansas City Society of Ophthalmology and Otolaryngology at a recent meeting in Kansas City.

Dr. Maurice Snyder, Salina, has opened offices in the Union Life Building in Salina, where he will continue a private practice. Dr. Snyder has been connected with the Mowery Clinic for the past four years. He was also certified as a diplomat of the American Board of Internal Medicine at a recent meeting of that board in San Francisco.

Dr. L. F. Steffen, El Dorado, has resigned as county health officer to engage in private practice. The vacancy will be filled by Dr. Roy Weathered.

## AUXILIARY

The State Auxiliary meeting at Wichita was again "the best attended in our history". Since each session of the Annual Meeting is larger in attendance than the one previously held, this description has become trite.

The Wichita press reported that two hundred and fifty ladies were entertained at the Cudahy Packing Plant, inspecting the great industry and participating in the delicious luncheon.

The Auxiliary Exhibit in the Hall of Health was cleverly conceived and arranged, graphically illustrating superstitions of the healing arts. It attracted much attention and was worthy of greater space.

All social occasions were most delightfully arranged. The inspection and the luncheon at the Cudahy Plant; the drive about the city to observe the many items of progress; the luncheons, teas and dancing in addition to the business sessions kept the ladies busily and happily employed.

At the delegates meeting the reports given indicated healthy organizations, good morale and preparedness for constructive work.

The meeting of delegates was followed by the traditional auxiliary luncheon which had a large attendance. The guest speakers were Dr. J. F. Gsell, President of The Kansas

Medical Society, and the Dean of Wichita University. The following officers were elected for the ensuing year and committee chairmanships announced:

President, Mrs. F. E. Coffey, Hays; President-Elect, Mrs. J. T. Hunter, Topeka; 1st Vice-president, Mrs. L. B. Spake, Kansas City; 2nd Vice-president, Mrs. G. A. Spray, Wichita; Recording Secretary, Mrs. C. O. West, Kansas City; Treasurer, Mrs. F. L. Dennis, Dodge City.

### COUNCILORS

1st District, Mrs. P. E. Conrad, Hiawatha; 7th District, Mrs. E. N. Robertson, Concordia; 9th District, Mrs. A. C. Gulick, Goodland; 11th District, Mrs. C. D. Blake, Hays.

### COMMITTEE CHAIRMEN

Archives, Mrs. J. B. Carter, Wilson; Health-Education, Mrs. W. J. Biermann, Wichita; Historian, Mrs. Clarence Kosar, Concordia; Hygeia, Mrs. T. D. Blasdel, Parsons; Legislative, Mrs. L. B. Gloyne, Kansas City; Organization, Mrs. R. W. Urie, Parsons; Parliamentary, Mrs. L. S. Nelson, Salina; Press-Publicity, Mrs. W. G. Emery, Barnard; Public Relations, Mrs. P. E. Conrad, Hiawatha; Exhibits, Mrs. E. J. Nodurft, Wichita.

The following resolutions were adopted:

"Whereas, the Women's Auxiliary to The Kansas Medical Society is the one organization having a common bond for all women of physician's families, and

Whereas, it's great objective is to untie such women into an influential, efficient organization for the furtherance of public health education and the dissemination of the gospel of scientific medicine as represented by state and national organizations of reputable medical men, there by promoting both public and professional welfare, therefore be it

Resolved, that the membership of the Kansas Medical Auxiliary should exercise every resource to bring into this organization all eligible women.

Whereas, our efficiency depends upon our becoming comprehensively informed on subjects of health conservation and legislative measures affecting medical practice, be it, therefore,

Resolved, that it becomes the duty of members to seek the bibliography now readily obtainable through the office of The Kansas Medical Society and to make studies of pertinent subjects a part of their Auxiliary program and personal reading. Also be it further

Resolved, that Hygeia, the only authoritative lay publication devoted to public health, be placed in all possible public schools, libraries and other suitable places in order to promote better public health information.

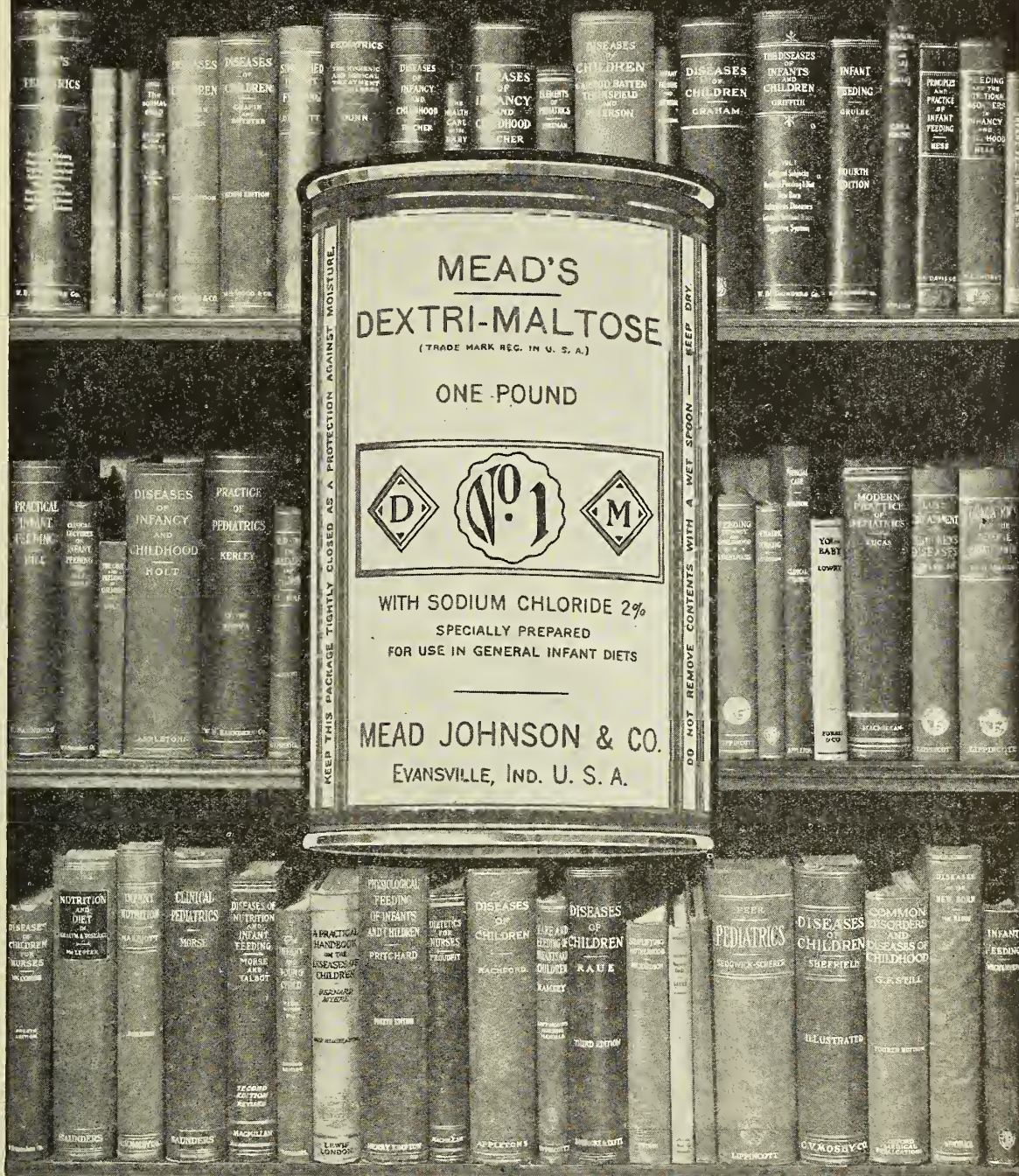
Whereas, the Sedgwick County Auxiliary and wives of members of the Sedgwick County Medical Society have made our Fourteenth Annual Convention, held in Wichita, a meeting of great interest and pleasure, the accomplishment of which entailed so much time and effort, therefore be it

Resolved, that we express our appreciation to the Sedgwick County Auxiliary, its committees and associated ladies whose arrangements resulted in so many happy courtesies: The luncheon at and viewing of the Cudahy Packing Plant, the interesting drive about Wichita, the tea and delightful program at the Wichita Country Club, the luncheon at the Lassen Hotel.

Whereas, the administration of our beloved Presi-



# BACKGROUND



**T**HE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons.  
 —Mead Johnson & Company, Evansville, Indiana, U. S. A.—



dent, Mrs. Urie, has been one of continued progress, materially and ethically, be it, therefore,

Resolved, that we extend to Mrs. Urie and her aides our sincere appreciation for their successful efforts."

The article by Mrs. Hunter, President Elect, was written during the season of 1937. It was received in midsummer. Because of the value of the bibliography as an aid and to the educational program makers, it seemed more appropriate to publish it at a time when it could be put to practical use.

### "HEALTH EDUCATIONS THRU AUXILIARIES

That there is a real and definite need for health education is an established fact. That the auxiliaries of the medical groups in Kansas can supply that need is something to prove.

The National Committee on Health Education, provides a wealth of material upon subjects that the medical wives of Kansas would do well to proclaim loudly and long. Some of the material has been sent to each of our auxiliaries, and bibliographies of subjects in which each group may be interested are available from the health chairman of Kansas. It is impossible to send each group a complete list of bibliographies; hence the following list may prove of worth to groups interested:

- Adolescence.
- Alcohol.
- Allergy.
- Amoebic Dysentery.
- Anaesthesia.
- Bacteriology.
- Doctors and Medical Practices.
- Deafness.
- There's a Doctor in the Story.
- Diabetes Birth Control, Biology.
- Diet-Food Nutrition.
- Child Guidance, Birth Injury, Climate, Hygiene.
- Industrial.
- The Pre-school Child, Contagious Diseases.
- The Common Cold, Diseases of Children.
- Height, weight, age tables for children.
- Heart Disease, Heart.
- Books on Personal Health, Nostrums and Quackery, For Assistant in Doctors Office.
- Home Care of the Sick, Cancer.
- Medical History and Progress, Eugenic Sterilization.
- General Health.
- Materia Medica and Therapeutics, Heredity.
- Prenatal Care, Stuttering, Stammering, Conservation of Eyesight.
- Sex—Adult, Marriage.
- Infant Care and Hygiene, Message.
- Parents and Teachers, Speech Defects.
- Adolescence, Feet.
- Mental Hygiene, Psysiotherapy.
- General Bibliography for Mothers, Menstruation, Menopause, Sex Textbooks.
- The Nervous Child.
- Communicable Diseases and Hygiene.
- Narcotics, Old Age, Middle Age.
- Physical Education, Corrective Exercise, First Aid, Use of Mercurochrome Intravenously.
- Tobacco, General, Surgical Technique for Nurses, Hydrotherapy.

Tuberculosis, Physical Therapy.

Weight, Medical Dictionaries.

Nervous and Mental Diseases, Goitre, Light Teachers.

Health of Teachers, Obesity in Children, Child Care, Under-weight and Nutrition, Obstetrical Nursing.

Bibliography for Nurses, Laboratory Techniques and Procedure Textbooks of Pediatrics.

You will note that these bibliographies should give to you an excellent working basis for study and information. Mrs. V. E. Holcombe, National Health Chairman, is most anxious for the local groups to become more intelligently active—so that real and helpful knowledge will be passed out to lay persons.

No doubt your community has been taking an interest in the weekly broadcast, over the Red network, on Wednesday afternoons at 1 p.m. This new radio program, primarily for schools, is of great interest to parents as well as children. The lessons are subtly injected, and the whole program is vital and appropriate.

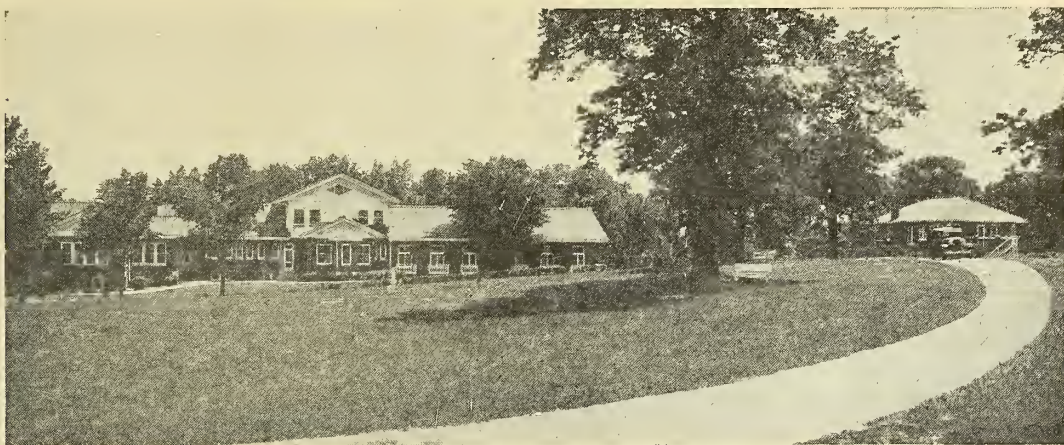
So Auxiliary members—there is a need for your activity—and a means to accomplish some fine work this New Year.

Renna R. Hunter, Health Chairman."

The following story, taken from a letter by Mrs. Gordon H. Ira, National News Letter, is most interesting as a historical episode relating to the birth of one National Women's Auxiliary. We might note, too, that the same initiative, perserverance, and courage, which Mrs. Red exemplified, are the same qualities with which our present successful leaders are endowed.

In 1922 Mrs. Samuel Clark Red, then completing her second term as president of the Texas Women's Auxiliary, took definite steps to organize the National Auxiliary. In describing her experiences, Mrs. Red said, "At the end of my second term I was so enthused that at a suggestion which came from my daughter, Lel, I decided to organize a National Auxiliary. I wrote many letters to prominent doctors and their wives in Texas and elsewhere asking advice. There was not a dissenting voice. I then wrote a resolution to the House of Delegates of the A. M. A. asking them to approve of such an organization. I asked my state auxiliary to approve of this resolution and allow me to send it in their name, which they did with enthusiasm.

"Up to this time I had never missed but three state medical meetings during my twenty years of married life and I had three fine sons to offer for alibies, but I had never attended a national meeting. Dr. E. H. Cary had been one of my most enthusiastic supporters and willingly took my resolution to the meeting in St. Louis. If I had known that august body then as I do now, I should never have had the nerve to beard the lion in his den as I did in May, 1922, and without my husband, too. At the very last he said that he had urgent business to keep him at home. Later he confessed that he knew if I went alone that many Texas doctors would feel sorry for me and gallantly help me out, which they did. The more there were working for the cause the better it would go over. Dr. and Mrs. Scott of Temple were my chaperones and moral supporters. Mrs. Willard Bartlett was chairman of the entertainment committee and showed me many courtesies but our organization meeting which was to be held in Shaws Gardens slipped a cog somewhere and no meeting was arranged for. I was in a panic. Someone got a megaphone and put me on a soap box or a chair or something and demanded that I tell them all about it.



# OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request

## OAKWOOD SANITARIUM

Tulsa, Oklahoma, Route 6

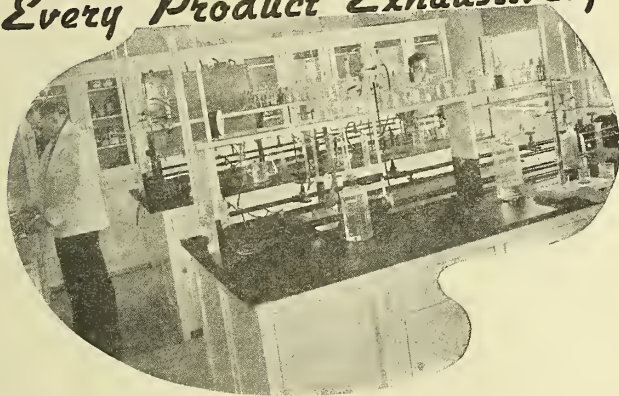
NED R. SMITH, M.D.  
Medical Director

S. CHARLTON SHEPARD, M.D.  
Attending Internist

T. N. NEESE  
Business Manager

DAISY N. NEESE  
Superintendent

## *Every Product Exhaustively* **TESTED!**



Physicians must have preparations the ingredients and efficacy of which are of unquestioned value. The steady growth of The Smith-Dorsey Company from 1908 is the best indication that our products measure up to these requirements.

## PHARMACEUTICALS

YOU CAN

PRESCRIBE WITH CONFIDENCE

Every Smith-Dorsey product is safeguarded in three ways:

- 1 We operate a control laboratory for the purpose of testing raw materials for purity.
- 2 Finished products are thoroughly tested for conformity to label statements.
- 3 No new products are released without subjecting them to physiological tests.

Our laboratory is modern and complete and is manned by competent university trained chemists. No expense is spared to make research complete. No preparations are ever offered the public.

Such is the background of Smith-Dorsey products.

**THE SMITH-DORSEY COMPANY** *Lincoln, Nebraska*

FOUNDED 1908



I was never so embarrassed in my life, but I did my best and scattered many copies of my state constitution thru the crowd. I heard one woman passing say to another, 'Oh, don't listen to her; she is some suffragette who wants to talk.' But just at the right moment a sweet-faced woman came up to me and said, 'I am Mrs. Leigh of Virginia. My husband is chairman of the committee that is acting on your resolution. He says it is a fine thing and will go over.' And it did. When the news was brought to me that it had been unanimously adopted, I was overjoyed. My husband's wisdom is shown in the fact that no less than six Texas doctors have assured me privately that it was due entirely to their individual influence that it did. And I love them every one, for what they did."

The Shawnee County Medical Society Auxiliary held their May meeting at the home of Mrs. James D. Bowen, May 9.

During the business meeting three projects, the Hygeia, library and exhibit were discussed. The club will start working on these projects immediately.

A tea and social hour followed the business meeting with Mrs. Ralph L. Funk presiding at the tea table. Mrs. S. R. Boykin and Mrs. G. H. Penwell were the assisting hostesses.

The following delegates represented the Shawnee County Auxiliary at the state convention in Wichita: Mrs. W. J. Walker, Mrs. G. W. B. Beverly, Mrs. C. B. Van Horn, Mrs. H. H. Woods, Mrs. J. Theron Hunter, Mrs. Floyd Taggart, Mrs. James D. Bowen and Mrs. Ransley J. Miller.

## NEW BOOKS RECEIVED

**HEMORRHOIDS**—By Marion C. Pruitt, M. D., President American Proctological Society; Associate in Surgery, Emory University School of Medicine. Octavo 170 pages with seventy-three illustrations, seven in color. Published by The C. V. Mosby Company, St. Louis, Missouri, at \$4.00 per copy. In sixteen chapters including: Etiology; Pathology; Embryology; Examination, Instruments, Anesthesia; Classification; Symptoms; Diagnosis; Differential Diagnosis; Treatment of External Hemorrhoids; Injection Treatment of Internal Hemorrhoids; Operative Treatment of Internal Hemorrhoids; Electrical Treatment; and Choice and Evaluation of Methods.

## JOHNSON HOSPITAL CHANUTE, KANSAS

Complete Clinical  
Laboratory  
Radium  
X-Ray

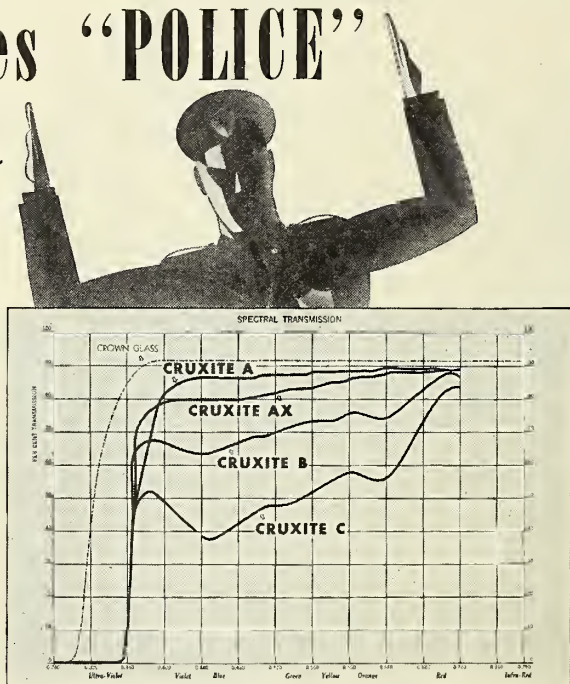
## Cruxite Lenses "POLICE"

*light two ways*

Cruxite Lenses protect eyes from excess visible and invisible light. This "double-barreled" protection is necessary, for excess visible light is usually accompanied by excess invisible light — useless as far as seeing is concerned, capable of harming the delicate tissues of the eyes, causing discomfort.

Cruxite does not distort color values — blends perfectly with the complexion — has all the refractive qualities of the finest white lenses — is also available in Tillyers Lens accuracy.

Cruxite Lenses are Patented



# AMERICAN OPTICAL COMPANY

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

AUGUST, 1938

Number 8

## CARDIOVASCULAR SYPHILIS DIAGNOSIS AND THERAPY

Aaron Arkin, M.D.\*

Chicago, Illinois

### FREQUENCY OF CARDIOVASCULAR SYPHILIS

Syphilis is responsible for about twenty per cent of all cases of cardiovascular disease in adults. It is the only one of the four most important causes of heart disease in adults (which are coronary sclerosis, hypertension, syphilis, and acute rheumatic fever) which is preventable at the present time. The early diagnosis and intensive treatment of every patient with syphilis will cause this form of heart disease to almost disappear. Syphilitic aortitis causes more deaths than any other form of syphilis.

About twenty per cent of all persons with acquired syphilis develop cardiovascular disease. This form of syphilis is a late manifestation, as the average length of time from infection to the onset of cardiovascular symptoms is about fifteen years. In luetic aortic regurgitation the average latent period is twenty years, and in aortic aneurysm twenty-two years. At necropsy we find that seventy-five per cent of persons with visceral syphilis have luetic aortitis. The serologic tests (Wassermann, Kahn) are positive in only eighty per cent of cases of cardiovascular syphilis. It is therefore important to know that twenty per cent of cases of luetic aortitis, aneurysm, and luetic aortic regurgitation have a negative Wassermann test.

Males are more often affected by syphilitic heart disease than females, the ratio being about four to one. Yet, there is no marked difference in the frequency of luetic aortitis in the two sexes. In females luetic aortitis takes a more benign course. The severe supravalvular forms of the disease with aortic regurgitation, aneurysm, and stenosis of the coronary ostia, are much more common in the male sex. Of

eighty syphilitic aneurysms seen in the Cook County Hospital Pathological Institute in five years only six were in women. Syphilitic heart disease is about three times as frequent in the negro as in the white. The higher per cent of infected individuals, more severe destructive changes in the aorta, greater per cent of manual laborers, and frequency of hypertension probably account for the higher incidence of aneurysm and aortic regurgitation.

In luetic aortitis found at necropsy about thirty per cent have aortic regurgitation, and about thirty-five per cent have aneurysm of the aorta or its large branches. Stenosis of the coronary ostia is a frequent finding. Syphilis never causes aortic stenosis. About sixty per cent of all cases of aortic regurgitation in patients past forty years of age are syphilitic.

### PATHOLOGY OF SYPHILITIC AORTITIS

Syphilitic aortitis, clinically a late manifestation of this disease, is the most frequent cause of death in syphilis. Infection usually occurs in the twenties, and the highest incidence of syphilitic heart disease is in the forties. The spirochete produces a chronic inflammation in the vasa vasorum of the aortic wall. These small vessels become obliterated and the media infiltrated with round cells and plasma cells. The elastic fibers are soon destroyed and small gummas containing spirochetes develop in the media. The intima becomes thickened and wrinkled. The inner surface of the aorta becomes wrinkled and depressed by small and large scars of pinkish or whitish color. Atheromatous changes are often combined with the luetic aortitis in an amount increasing with age. The mouths of the large vessels are often fibrosed and greatly constricted or entirely occluded. The coronary ostia are frequently stenosed or obliterated.

As the aortic wall loses its elastic fibers the wall becomes weakened and stretches under the influence of the blood pressure. We shall see that this dilatation of the aorta is the earliest diagnostic sign of syphilitic aortitis, and can be diagnosed in about seventy-five per cent of cases before the development of aneurysm, aortic regurgitation, or angina pectoris. A demonstration of widening of the ascending aorta

\* Associate Professor of Medicine, Rush Medical College of University of Chicago and Professor and Chairman, Department of Medicine Cook County Graduate School of Medicine.



on fluoroscopic examination is the most reliable, and usually the earliest evidence of syphilitic aortitis.

The second important pathologic change is aneurysm formation. The aorta may dilate more or less diffusely, or locally. The wall may bulge in one direction and produce a saccular aneurysm. Several bulgings may unite to form a large irregular sac. These may reach a huge size and cause severe pressure symptoms, erosion of any of the bony structures of the chest or may rupture. Calcification of the wall may lead to a stationary condition.

The third, and most serious pathologic change, is aortic regurgitation. This is found in about two-thirds of the cases diagnosed clinically. The disease frequently attacks the aortic ring, especially at the commissures. The cusps become separated by the stretching of the aortic ring, and are too small to close the lumen in diastole. A regurgitation results. Syphilitic aortitis causes only one valvular lesion, an aortic regurgitation, never a stenosis. The disease does not affect the mitral or tricuspid valve. In rare instances the pulmonary valve is affected, and then there is also a regurgitation, never a stenosis.

The fourth important change is stenosis of the ostia of the coronary arteries. This process is very slow, in spite of the small size of these two arteries. Anoxemia of the heart muscle with angina pectoris develops. Later there is paroxysmal dyspnoea or cardiac asthma, due to left ventricular failure. The stenosis is so gradual that one ostium may be entirely occluded without causing clinical symptoms; there is plenty of time for collaterals to form so that the heart gets its blood from the other coronary artery. An aortic regurgitation with a fall in the diastolic blood pressure reduces the coronary blood flow still further. Sudden death is quite common in such cases of aortic regurgitation with coronary stenosis.

Fifth, come the changes in the heart muscle itself. The heart is as a rule not affected by a luetic aortitis unless there be an aortic regurgitation or coronary stenosis. Aneurysms may reach a large size and yet the heart remain normal. The aortic regurgitation always causes hypertrophy and dilatation of the left ventricle; later there is a relative mitral insufficiency. Then follows a compensatory involvement of the right heart, with ultimate failure of the entire heart. Syphilitic myocarditis is rare; occasionally a gumma in the bundle of His causes a heart block.

#### DIAGNOSIS OF SYPHILITIC AORTITIS

In luetic aortitis the diagnosis is of greatest value to the patient in the early uncomplicated stage, before regurgitation, aneurysm, or angina pectoris have developed. The earliest and most important diag-

nostic sign is the demonstration of a widening of the ascending aorta, or any other part of the aorta, on fluoroscopic examination. Any ascending aorta more than 2.5 to 3.5 cm. in diameter between the ages of forty and sixty years should be suspected of being luetic. This is especially true with a positive Wassermann, Argyll-Robertson pupils, absent patellar reflexes, or other evidence of lues. Such widening of the aorta is often recognizable five to ten years after the primary lesion, and many years before regurgitation or aneurysm occur.

The second most important sign of aortic syphilis without regurgitation is the increased manubrial dullness, usually to the right of the sternum. This dullness may be accompanied by a localized pulsation in the second or third right interspace.

The third important finding is the tambour or bell-like aortic second sound. It has been compared with the sound of an Arabian drum or "tabourka". The changed character of the aortic second sound is the first physical sign of early luetic aortitis.

A fourth frequent finding is a systolic murmur at the base, found in about two-thirds of the cases of uncomplicated luetic aortitis. It must be remembered that a systolic murmur at the base is a frequent finding in patients past middle life, due to aortic atheromatosis or sclerosis of the aortic cusps in the absence of aortic syphilis. A systolic murmur usually accompanies the diastolic murmur of aortic regurgitation. I believe this is due to the stretching of the ring which keeps the cusps under tension in systole. We have already stated that syphilis never causes aortic stenosis. A true stenosis is due to rheumatic endocarditis, bacterial endocarditis, or in rare cases a congenital lesion or calcification of the aortic cusps in old age.

The fifth sign of syphilitic aortitis is an aneurysm of any portion of the aorta, or of one of its large branches. Aneurysms of the descending thoracic aorta and abdominal aorta are not so rare. Next in frequency to aneurysms of the aorta are those of the innominate artery. In the diagnosis of aneurysm the x-ray is of great importance.

A sixth sign of luetic aortitis is angina pectoris. It is usually of a severe type and progressive. We have already stated that the pain is due to stenosis of the coronary ostia, or lowering of the diastolic blood pressure by the aortic regurgitation. Evidence of luetic aortitis, or a positive Wassermann speak for angina pectoris due to syphilis.

#### THERAPY OF CARDIOVASCULAR SYPHILIS

Cardiovascular syphilis can be prevented by the intensive treatment of all syphilitics, beginning with the sero-negative primary stage. This requires an

early diagnosis by dark field examination. At this early stage a permanent cure can be attained in a very high percentage of infected persons. Such a cure requires at least eighteen months of continuous therapy with arsphenamine and bismuth or mercury. Thirty injections of the arsenical and thirty to sixty injections of a bismuth compound in the first two years should be the therapeutic objective to prevent recurrence and late manifestations of syphilis. With such treatment syphilitic aortitis would be prevented. A "cure" would be attained in at least ninety per cent of patients with a primary lesion. In latent syphilis the length of time necessary for a cure is more than two years.

From my experience with hundreds of patients with cardiovascular lues I can state that in the past ten years eighty-five per cent of the cases had little or no treatment prior to the onset of their cardiovascular symptoms. Practically none of the cases of luetic aortitis had received the present standard of anti-syphilitic treatment.

The treatment of patients with clinical evidence of cardiovascular syphilis requires greater care than in any other forms of syphilis. The chief measure in the treatment of aortic syphilis is rest, more or less complete, according to the severity of the symptoms. Strain should be forbidden even in mild cases. With cardiac enlargement, angina pectoris, aortic regurgitation, or aneurysm the patient should avoid all exertion. Angina pectoris and congestive heart failure are treated as for other causes. Aminophyllin intravenously is of great value in congestive failure with Cheyne-Stokes breathing. The anginal pain is often relieved. Salyrgan is one to two cc. dose intravenously, combined with the administration of ammonium chloride, is our best diuretic and at the same time a useful mercurial antiluetic drug.

In the presence of congestive heart failure antiluetic therapy should be withheld until treatment of the failure has been successful. Narcotics may be necessary for the insomnia, pain and dyspnoea due to pressure of an aneurysm.

When a diagnosis of luetic aortitis has been established therapy should be instituted at once, in the absence of congestive heart failure or serious hepatic or renal disease. The patients should receive ten to twenty grains of potassium iodide three times daily for six to eight weeks. Mercury may be used by inunction or better intramuscularly (mercury salicylate one-half to one grain once a week until six grains have been given). Then neoarsphenamine should be given once or twice weekly in doses from 0.3 to 0.6 gram until fifteen injections have been given. It should be given very cautiously in aortic regurgitation, and avoided in angina pectoris. After one month the

arsenical should be repeated. Four or five complete courses of mercury or bismuth, iodides, and arsenical, should be given the first two years. After a few months two more courses should follow. Large amounts of bismuth or mercury are more successful than arsenicals in producing clinical and serologic negativity in latent syphilis. Very satisfactory results are obtained in a majority of cases, with decrease of symptoms and cessation of the growth of the dilated aorta or aneurysm. In aortic regurgitation very little can be accomplished with specific therapy. Bismuth, mercury, and iodides are safest. The cardiac failure must be treated with rest, digitalis, and morphine as in rheumatic cases. For aneurysm a low blood pressure should be maintained by rest, limited diet, and plenty of sleep.

## INDUCED NON-TOXIC JAUNDICE (HYPERBILIRUBINEMIA) IN PATIENTS WITH ATROPHIC ARTHRITIS

(SECOND REPORT)

Harry E. Thompson, M.D., and

Bernard L. Wyatt, M.D.\*

Tucson, Arizona

The first successful induction of a non-toxic jaundice in patients with atrophic (infectious) arthritis was reported by us<sup>1</sup> some time ago. During the past eighteen months we have studied and made further observations upon sixteen patients with chronic atrophic (infectious) arthritis in whom a non-toxic jaundice was induced. Since our original publication was mainly concerned with the method of production of the jaundice and its immediate effects, we thought it worthwhile to record our observations with respect to its effect on the course of an arthritis and to discuss various laboratory and clinical data.

Patients selected for induced jaundice were, in the majority, those in whom conventional forms of therapy<sup>2,3</sup> had been unsuccessful. Most of these patients had been under observation for some time, hence we were more or less familiar with their individual remissions and exacerbations so characteristic of the disease. Unless altered for experimental or other reasons, there were certain requisites for a patient before he was considered suitable for induced jaundice; namely: First, the presence of an active atrophic arthritis as judged by the usual clinical

\* From the Wyatt Research Foundation, Tucson, Arizona.



criteria in which pain, swelling and disability are the prominent symptoms. Patients were not considered suitable when there were far advanced articular destruction, ankylosis and mechanical deformities, since arrest of the arthritic activity could not be expected to alleviate those existing changes due to bone and joint destruction or ankylosis. Second, the absence of complicating or debilitating diseases and, third, suitable veins for daily intravenous infusions.

Sixteen patients were selected. On Table No. 1 are listed the case numbers, the ages, the duration and severity of the arthritis, and the number of infusions given. They may be briefly summarized as follows: The ages ranged from nineteen years to fifty-seven years. The duration of the arthritis varied from 1 year to 11 years and the severity was from moderate to marked in character. The 16 patients received daily intravenous infusions of the bilirubin-salt mixture in total dosages as follows: 7, 7, 7, 8, 9, 9, 9, 8, 10, 11, 12, 9, 6, 15, 11 and 12 for an average of 9 plus injections to each series.

Jaundice appeared after a few injections and became more generalized and marked with each succeeding injection. It disappeared in from fourteen to twenty-seven days after the last infusion.

The resultant effect of the induced jaundice in these 16 patients is also listed in Table No. 1. These results may be analyzed as follows: Fourteen of sixteen patients experienced relief of symptoms, i.e., analgesia and diminished swelling for varying periods of time. "Short remissions" of five to forty days followed the induced hyperbilirubinemia in eight patients, while "long remissions" of from two to thirteen months followed the jaundice in six patients. Two patients received no benefit; one, a patient in whom the administration was stopped after the sixth dose, and the other, a patient with a far advanced arthritis with a tremendous amount of articular damage.

A brief description of the "short remissions" is as follows: Two patients (No. 1 and 5) who experienced short remissions of a few days with a return of equal severity became inactive at the end of four and six months. One patient (No. 15) underwent a partial remission for thirty days which became complete after three months. These three patients have been inactive now for periods of fifteen, six and three months. Three patients (No. 6, 9 and 13), in whom remissions of twenty-one, eighteen and fourteen days were induced, had a partial return of symptoms of less severity. One patient (No. 2) had a remission of twenty-one days followed by a return of arthritis as severe as before the jaundice. One patient (No. 8), a spondylitic, experienced some analgesia and increased mobility

for fifteen days and then underwent a severe exacerbation of all symptoms following his brief remission.

A brief description of the "long remissions" is as follows: A psoriatic arthritic (No. 4) experienced a remission of 5.5 months followed by a partial return of symptoms to the knees, ankles and feet, but no return to the small points of the hands. One patient (No. 10) underwent a remission lasting five months followed by a slight return of symptoms, however, she felt well enough to be married at that time. Another patient (No. 11) had a remission of two months followed by a return of his arthritis of equal severity. Another patient (No. 16) underwent a partial remission (considered eighty per cent) and has maintained her improvement for 5 months. Two patients (No. 7 and 17) have experienced remissions continuing, to the present, for periods of five months and thirteen months.

Before summarizing these results it is of interest to note that analgesia and diminished swelling occurred at variable intervals, i.e., before the onset of the visible jaundice or with it, or after the icterus became quite marked; further, that the disappearance of the jaundice with a return of arthritic manifestations was followed in some cases by complete inactivity for an extended duration and, finally, that a jaundice induced by bilirubin alone is without beneficial effect. (See our original publication.) Therefore, it is evident that the clinical response does not necessarily bear a direct relationship to the degree of induced visible jaundice per se.

To return to the summary, it was observed that fourteen out of sixteen patients experienced a diminution of swelling and analgesia either partial or complete for variable lengths of time after their induced jaundice. The return of symptoms were more severe in only one case, the same severity in two cases, while in eleven cases the return of symptoms was only partial and of less severity (five cases) or was followed by a complete inactivation of the arthritis after a temporary return (three cases) or partial relief was continued (one case), or a complete remission with no return of symptoms persisted (two cases, periods of five and thirteen months).

#### LABORATORY DATA

No toxic effect upon liver or kidney could be demonstrated in these patients as judged by liver function tests (Bromsulphalein and galactose tolerance) or by kidney function tests (routine urine analysis, dilution and concentration, and phenolphthalein).

No change occurred in the blood counts of these patients attributable to the jaundice. There ap-

peared to be no bactericidal effect of the hyperbilirubinemia in patients with frank focal infections. And we have noted no antiseptic action *in vitro*. Agglutination titres to standard strains of streptococci were not changed.

There was some variability, however, in the sedimentation rates, but not of predictable nature. It was observed though that these rates bore considerably more relation to the clinical response than other laboratory data.

The serum bilirubin curves, as well as the qualitative Van den Berghs, were of interest. In general, it may be said that the serum bilirubin level (at twenty-four hours) gradually increased from original values (0.3 to 2.0 mgm per 100 cc.) to as high as 14.6 mgm per 100 cc. with peaks at five minutes after injections as high as 35.0 to 40.0 mgm per 100 cc. The qualitative Van den Berghs in the majority of instances gave indirect and later direct reactions which became more prompt and intense with succeeding injections. Although we are unwilling at this time to stress the possible clinical significance of the changing Van den Bergh reactions, investigations which are being carried out in the laboratory at this time indicate a possible relationship. These will be reported at a later date.

### GENERAL SUMMARY

From these studies it is apparent that a jaundice (hyperbilirubinemia) can be induced safely in

patients by means of daily intravenous infusions of a bilirubin-bile salt mixture prepared according to our technic. The inactivating effect of this artificial jaundice is similar to that observed to occur in spontaneous jaundices reported by Hench<sup>4</sup> and others<sup>1,5</sup>. The mechanism of the inactivating effect is not fully apparent and, while there is said to be an analgesic serum bilirubin level in intercurrent clinical jaundices<sup>4</sup>, in our studies with an induced jaundice these levels have not been sufficiently parallel to the clinical response to draw any definite conclusions. It is necessary to emphasize here that the mere presence of a visible jaundice does not mean that it will have a beneficial effect, since a jaundice induced with bilirubin alone is without benefit and the relief of pain and swelling may occur before the onset of a visible jaundice or not at all during the jaundice. Hence it seems that this inactivating effect occurs with some jaundices, but that the degree of visible jaundice is not necessarily an index of its therapeutic potency. It is questionable if there is an inactivating agent present in the prepared solution or if there is a stimulation of certain tissues in the body in an indirect manner to produce this beneficial effect.

This preliminary work demonstrates that it is possible to inactivate an atrophic arthritis in this manner more rapidly than by any other measure. While it is not a procedure for universal use and is difficult and requires familiarity with the technic, and while the remissions are somewhat disappointing in

Table No. 1. General Summary of 16 patients in whom jaundice (hyperbilirubinemia) was induced by daily infusion of a bilirubin-bile salt mixture.

Case No.	Age Yrs.	Duration & Severity Arthritis	No. Inj's. Recd.	Duration of Jaundice	Duration of Remission	Effect
1	35	4.0 years marked	7	18 days	15 months	Short complete remission. Partial return of symptoms for 3 months. Now inactive 15 months.
2	45	3.5 years moderate	7	18 days	21 days	Short remission. Return of equal severity.
4	26	2.5 years marked	7	21 days	5.5 months	Partial return to lower extremity. No return to upper extremity. (15 months).
5	45	6.0 years marked	8	18 days	12 days	Short remission followed by partial return of symptoms, then progressive improvement to inactivity at 6 months.
6	57	2.0 years moderate	9	21 days	21 days	Short remission followed by partial return (approximately 50 per cent).
7	47	6.5 years marked	9	23 days	13 months	Complete remission still present.
8	19	3.9 years marked	9	14 days	15 days	(Spondylitis) Analgesia 15 days followed by severe exacerbation.
9	29	7.0 years marked	8	21 days	18 days	Partial return of symptoms (approximately 50 per cent improved).
10	24	11.0 years moderate	10	20 days	5 months	5 months remission. Slight return of symptoms for 10 months.
11	47	1.0 years moderate	11	22 days	2 months	2 months remission followed by return of symptoms of equal severity.
12	56	6.0 years marked	12	18 days		Slight transitory analgesia and diminished swelling (failure).
13	29	4.0 years marked	9	14 days	14 days	Remission 14 days with return of equal severity followed by progressive improvement.
14	34	2.0 years moderate	6			Administration stopped after 6 doses.
15	30	3.5 years moderate	15	20 days	30 days	Partial remission (50 per cent) going to complete in next 3 months and continuing to present (6 months).
16	27	7.0 years marked	11	21 days	5 months	Partial remission (80 per cent) continuing to present (6 months).
17	36	9.0 years moderate	17	15 days	5 months	Remission still present.



their lengths and the results not 100 per cent, it is evident that the disease process in atrophic arthritis is reversible. It is conceivable that in time this work will lead to the isolation of an active ingredient or concentrate which may be administered with ease and at infrequent intervals.

### CONCLUSIONS

Observations on sixteen patients with chronic atrophic (infectious) arthritis in whom a non-toxic jaundice was induced are presented: These patients were, in the majority, refractive to the usual forms of therapy. Remissions, either partial or complete, were induced in fourteen patients for variable lengths of time. From these studies we may conclude that the clinical effect and the therapeutic implications are more closely related to the mechanisms occurring with jaundice induced in this manner, than to a visible jaundice or to serum bilirubin values per se.

### BIBLIOGRAPHY

1. Thompson, Harry E., Wyatt, Bernard L.: Experimentally Induced Jaundice (Hyperbilirubinemia). Report of Animal Experimentation and the Physiological Effect of Jaundice in Patients with Atrophic Arthritis. *Archives Internal Medicine* V. 61, No. 3, March, 1938, pp. 481-500.
2. Thompson, Harry E., Wyatt, Bernard L. and Hicks, R. A.: Atrophic Arthritis. *Annals Internal Medicine*, Vol. 11, No. 10, April, 1938, pp. 1792-1805.
3. Wyatt, Bernard L.: The Fundamentals of Diagnosis and Treatment of Arthritis. *Journal of The Kansas Medical Society*, November, 1937.
4. Hench, Philip S.: Effect of Jaundice on Chronic Infections (Atrophic) Arthritis and on Primary Fibrositis: Further Observations; Attempts to Reproduce the Phenomenon. *Archives Internal Medicine*, Vol. 61, No. 3, March, 1938.
5. Sidel, Nathan and Abrams, Maurice L. Jaundice in Arthritis: Its Analgesic Action. *New England Journal Medicine*, January 25, 1934, pp. 181-182.

## CYCLOPLEGICS, MYDRIATICS AND MIOTICS\*

Lyle S. Powell, M.D.

Lawrence, Kansas

In this brief discussion of cycloplegics, mydriatics and miotics some observations will be made concerning the characteristics of the drugs most commonly used. The actions of some of the drugs less commonly used will also be noted, both when used alone and in combination with other drugs.

Cycloplegia is, of course, desirable in refraction in order that the accommodative reflex may be more or less abolished temporarily so that the static refraction of the eye may be more accurately determined. In any discussion of cycloplegics one is apt to focus so much attention upon the completeness of the cycloplegia that the individual patient may not receive due consideration. An accurate estimate of the situation for each individual patient depends up-

on many other things than his static refraction. We may say then at the outset that cycloplegia is important and should be as complete as possible unless it is absolutely contra-indicated. On the other hand, the convenience of the patient, the economic aspect due to the loss of time from work, the possibility of a toxic reaction and many other factors must be considered.

### I

Scopolamine hydrobromide has been and still is used by many oculists as a cycloplegic. Bothman<sup>1</sup> has recently reported his observations with scopolamine as compared to atropine and homatropine. He observes that "scopolamine is a more complete cycloplegic than homatropine, while atropine gives more complete cycloplegia than either homatropine or scopolamine." Scopolamine is not widely used because of its toxic effect and Wilkinson, in discussing Bothman's paper, called attention to the fact that patients with empty stomachs are much more "susceptible to scopolamine intoxication than those who have come in after being fed."

Atropine is widely used as a cycloplegic, especially in young children and in selected adult cases because of its well known efficiency in abolishing the accommodative reflex. It is necessary, however, that the atropine be instilled over a period of three or four days in order to gain the cumulative effect. The resultant period of cycloplegia lasts for a varying period, of from seven to fourteen days. Cocaine is often combined with atropine or homatropine but is being largely discarded because of its clouding effect upon the corneal epithelium and the interference with the reflex in retinoscopy and ophthalmoscopy. Myerson and Thau<sup>2</sup> recently called attention to the fact that benzedrine used in conjunction with a lesser amount of atropine than usual gives practically complete but temporary cycloplegia and that the recovery period is very much shortened. It is understood that the shortened recovery period is not due to the benzedrine but to the fact that a lesser amount of atropine is used and that the cycloplegia is practically complete because of the synergistic action of the benzedrine with atropine.

This report of Myerson and Thau<sup>2</sup> has stimulated Beach and Adams<sup>3</sup> to investigate the synergistic action of benzedrine with homatropine as well as atropine in cases of refraction. They conclude that "the benzedrine method has, with us, had a special field of usefulness in the care of out of town patients and in the clinic. When time is short, the action is quick. No potent drugs need be given incompetent parents. Systemic effect causes no anxiety. Cycloplegia is possible where a second visit cannot be made for examination and where students and adults must

\*Read before the Section on Ophthalmology and Oto-laryngology of The Kansas Medical Society, Wichita, Kansas, May 12, 1938.

return immediately to work. Patients enthusiastically welcome the freedom from annoyance and the rapid recovery. Where results are uncertain, the orthodox method may still be employed."

Attracted by the favorable reports of Beach and Adams, extensive studies have been made of this method of cycloplegia in patients of different age groups, all physically sound, at the Osawatomie State Hospital. Certain of these studies have already been reported.<sup>4,5</sup> The author has also been using this method for the past year in private practice. The procedure found most effective is as follows: Homatropine two per cent sol. administered gtts. one in each eye of each patient observed, and repeated in five minutes. Five minutes following the second administration of homatropine gtts. one per cent ophthalmic benzedrine ophthalmic solution is instilled in each conjunctival sac. Great care must be taken that the instillations are properly given in order to obtain the best results. Marked dilatation of the pupil results, usually within thirty minutes. This dilatation is greater than that with either scopolamine, atropine or homatropine alone. It is well known that the pupillary reaction to light may be abolished and the pupil widely dilated while the ciliary muscle may still retain a certain amount of reaction. The most favorable time for refraction is apparently sixty to seventy minutes following the first administration of homatropine, altho the maximum cycloplegia may in some instances not occur until two hours have elapsed. Complete cycloplegia is obtained in a high percentage of patients by this method, as determined by retinoscopy, the measurement of accommodation by the Prince rule and the addition of plus three sphere to the trial case refraction. Following this method of cycloplegia there is an appreciable return of accommodation at the end of four hours and a complete return of accommodation in ninety-three per cent at the end of eight hours without the instillation of any counteracting drug. It may be said then that while some differences of procedure from those of Beach and Adams have been adopted, in the main their conclusions are largely confirmed.

## II

Mydriatics are used chiefly to dilate the pupil when no interference with the accommodative reflex is desired. Perhaps the most common use is in the examination of the interior of the eye.

Cocaine solutions of different strengths were long used for mydriasis. Now, however, this has been practically abandoned because of the ruffling effect of the solution upon the corneal epithelium and the resultant interference with ophthalmoscopy. Not a few self-inflicted injuries to the corneal epithelium

have also resulted from unintentional wiping of the anesthetized cornea by the patient.

More recently solutions of ephedrine sulfate have been used for mydriasis. A large number of patients of different age groups have been studied at the Osawatomie State Hospital following the instillation of ephedrine sulfate solution. A marked, constant, uniform pupillary dilatation occurred in all patients at the one-half hour, one hour and two hour intervals. An exceedingly small number of patients showed a decrease of one m.m. in the size of the pupil at the end of four hours. The great majority persisted several hours longer. The pupils were uniformly inactive to light at the one-half hour, one hour and two hour intervals. At the end of four hours a partial return only of the light reaction had occurred and a decrease of from one to five diopters in accommodation was observed. No consistent trend was observed in the intra-ocular tension. Ephedrine solutions then may be said to be unsatisfactory where mydriasis only is desired.

Adrenalin chloride solution (epinephrine) is often used in an attempt to secure satisfactory mydriasis for ophthalmoscopy. Gifford<sup>6</sup> states "Adrenalin in the ordinary 1/1000 solution causes mydriasis only when injected sub-conjunctivally or used on a cotton pledget which is left in the upper cul-de-sac for several minutes." A large number of cases of different age groups, all physically sound, have been studied at the Osawatomie State Hospital, using adrenalin chloride solution in an attempt to obtain satisfactory mydriasis for ophthalmoscopy. In only an occasional case did satisfactory mydriasis occur and little if any difference could be observed between the effect of adrenalin chloride 1/1000 solution and adrenalin chloride 1/100 solution. It may be said then that the use of these solutions for mydriasis in the non-pathological eye is unsatisfactory. It is felt that only in the presence of injury to the corneal epithelium does consistent mydriasis occur with the use of these solutions.

Duane<sup>7</sup> states that euphthalmine in two per cent solution produces a comparatively transient dilatation of the pupil which can be abrogated by one per cent pilocarpine. A five per cent solution produces a much more lasting effect which pilocarpine may not suffice to counteract. Gifford<sup>6</sup> observes concerning euphthalmine that its "effect is chiefly on the size of the pupil, only a slight weakness of accommodation being brought about. Its effects last only two to three hours so it is of especial value for ophthalmoscopic examination or retinoscopy in patients past the age of forty-five years." It has been found that there is always some loss of the accommodative reflex which on occasion is quite considerable. This has



been found, however, to be quite transitory and may be abrogated by the use of pilocarpine or eserine.

Paredrine hydrobromide three per cent solution in boric acid has recently been studied at the Osawatomie State Hospital as a mydriatic, both in patients below fifty years and on patients between fifty and seventy years of age. This is a new synthetic preparation related to benzedrine. It was concocted in an effort to meet more completely the requirements for a drug of optimum sympathetic activity in that it carries a hydroxyl in the para position. This solution produces definite mydriasis in both old and young people but this mydriasis subsides at the end of four hours and is usually accompanied by a slight decrease in intra-ocular tension and only a slight but definite decrease in accommodation.

Benzedrine sulfate has recently come into use in many phases of medicine. The Council on Pharmacy and Chemistry of the American Medical Association<sup>8</sup> have made a relatively complete presentation of the pharmacology of the drug. Myerson and Thau<sup>2</sup> state that "benzedrine sulfate acts adrenergically in all respects on the eye." Benzedrine sulfate ophthalmic solution has also been studied at the Osawatomie State Hospital on different age groups and when used alone in the one per cent solution was found to produce a marked and relatively prompt dilatation of the pupil with no appreciable consistent effect on accommodation. The maximum dilatation occurred at thirty to forty minutes and the return of the pupil to normal is complete at the end of four hours without the use of a counteracting drug. It was found that the instillation of a single drop of one-quarter of one per cent benzedrine sulfate ophthalmic solution produces appreciable but incomplete dilatation of the pupil of less than four hours duration without the use of a counteracting drug. This later procedure produces sufficient mydriasis for ophthalmoscopic examination in all but the occasional case.

### III

Miotics are used for the purpose of constricting the pupil in non-pathological eyes, chiefly after cycloplegia or mydriasis or both. This serves the dual purpose of causing a more rapid subsidence of the annoying symptoms of a dilated pupil and as a protection against a possible rise of intra-ocular tension. Gifford<sup>6</sup> states "in persons above the age of twenty-five years, it is certainly safest besides the use of a miotic once in the office to dispense a small amount of the miotic for use once or twice before retiring on the day of the refraction. While this practice may be unnecessary in most cases, its use as a routine will probably save at least one eye during the life of the average ophthalmologist. It is not

the author's intention to magnify the dangers of these indispensable drugs which provide so much material for talk by the retracting optician, but they must be kept in mind and it is only by taking every possible precaution against them that ophthalmologists may avoid the rare tragedies which keep unscrupulous tongues wagging."

Pilocarpine has long been used as an effective miotic. The two per cent solution was used in a study of a group of cases who had been refracted under homatropine-benzedrine cycloplegia. Following the administration of pilocarpine there was a partial return of the pupil to normal size and a marked improvement in accommodation. This effect, however, was transitory and in the end made little difference in the eventual recovery time from the homatropine-benzedrine cycloplegia. It is presumed that should the doses of pilocarpine be repeated frequently that the recovery time would be shortened and the improvement in accommodation maintained.

Eserine (physostigmin salicylate) is well known to have a stronger and more persistent miotic effect than pilocarpine. It has had the disadvantage, however, of causing more or less severe reactions in certain cases, especially when used in strong solutions. A one per cent solution of eserine made up in a tear isotonic solution as a buffer has seemed to allow the use of stronger solutions of eserine without reactions. Several groups of patients have been studied and the solution used routinely following all cases in which cycloplegics or mydriatics have been used, both in the Hospital at Osawatomie and in private practice has failed to produce a single reaction to the one per cent buffered eserine solution. Group studies on the recovery from homatropine cycloplegia disclose that in almost every instance there is a return of accommodation and pupillary size almost to normal within thirty minutes. If only one drop is instilled, however, the effect is soon lost in the case of homatropine cycloplegia and at the three-hour interval the accommodation and pupillary size have again receded markedly, from which they again begin to rise.

In the case of homatropine-benzedrine cycloplegia the same prompt return of accommodation occurred within thirty minutes. Due to the fact, however, that the homatropine-benzedrine cycloplegia is not as persistent as the homatropine cycloplegia, the effect of the miotic is seemingly greater. It has been found that if the dose of eserine one per cent solution is repeated in fifteen minutes that the continued miotic action of eserine tends to meet the natural recovery from the homatropine cycloplegia

and that the patients experience very little inconvenience.

The same studies were repeated with the buffered eserine solution one-half per cent with the same tendency to recovery, but less complete in nature. Again, the same studies were repeated with the ordinary one grain of eserine to one ounce of distilled water solution with the same tendency but even less complete return of accommodation and normal pupillary size.

### COMMENTS

Homatropine-benzedrine cycloplegia has proven itself to be of great practical value both from the standpoint of the completeness of the cycloplegia obtained and the greatly shortened recovery period. In very young children and in other selected cases the orthodox atropine or homatropine cycloplegia is probably more effectively employed.

Paredrine and benzedrine ophthalmic solutions have proven very satisfactory as mydriatics because of the wide dilatation of the pupil, the clear cornea and the relatively quick recovery period. Benzedrine when used in combination with homatropine or atropine produces a more widely dilated pupil than does the administration of either atropine or homatropine alone.

Eserine (physostigmin salicylate) one per cent ophthalmic solution prepared in a tear isotonic solution as a buffer has proven to be an effective miotic following both cycloplegics and mydriatics. No toxic or inflammatory reactions to this solution have been observed.

### BIBLIOGRAPHY

1. Bothman: Transactions of the Academy of Ophthalmology and Otorology, 1937, p. 165.
2. Myerson and Thau: Human Atonomic Pharmacology IX, Archives of Ophthalmology, Vol. XVIII, No. 1, p. 87.
3. Beach and Adams: Transactions of the American Academy of Ophthalmology and Otolaryngology, 1937, p. 179.
4. Lyle S. Powell and Marshall E. Hyde: Journal of The Kansas Medical Society, Vol. XXXIX, No. 1, p. 1, January, 1938.
5. Lyle S. Powell and Marshall E. Hyde: Journal of The Kansas Medical Society, Vol. XXXIX, No. II, p. 57, February 1938.
6. Gifford: Ocular Therapeutics, Lea & Febiger, 1932, p. 42, 43.
7. Duane: Fuch's Textbook of Ophthalmology, 6th Edition, J. B. Lippincott & Co., p. 389.
8. Journal American Medical Association, 109; 25: 2064: 2069, December 18, 1937.

Standard Brands, Inc., New York, has entered into a stipulation with the Federal Trade Commission to discontinue certain misleading representations in connection with the sale of Fleischmann's Compressed Yeast.

The company agrees to stop representing that its yeast will cure or prevent constipation, bad breath, boils, acne, pimples or other manifestations of irregular digestion, and that it will "clear" skin irritants out of the blood, unless limited to such skin irritants as competent scientific tests prove can be removed from the blood by using the product. —Better Business Bulletin, August 4, 1938.

## TUBERCULIN SURVEY OF SCHOOL CHILDREN IN SEDGWICK COUNTY

Floyd C. Beelman, M.D.

Wichita, Kansas

One of the most interesting, fascinating bits of medical history is seen in the determined progressive fight against tuberculosis. The steady decline of the mortality rate of a disease recognized as one of man's most dreaded destroyers is an indication of what can be accomplished by modern medicine, backed by an educated, interested public. As a menace to public health with an enormous annual inroad into the taxpayers pocket, tuberculosis presents a more difficult problem than it did twenty years ago. Any disease, that in spite of all efforts, picks the flower of our civilization by being the leading cause of death between the ages of fifteen to thirty years, certainly should command our respect and renewed efforts in its eradication.

It has been fifty-six years since Koch discovered the tubercle bacillus and suffered his great disappointment in tuberculin as a protective agent. In passing, it is interesting to note that with the recent studies in the synergistic action of antigens, there is the possibility that tuberculin may assume the role for which it was intended by Koch. However, as a diagnostic agent, tuberculin has been a definite valuable contribution. Up until a few years ago, Koch's "Old Tuberculin", (O.T.) was used entirely in the skin test for tuberculosis. This solution has not been dependable in strength, was not uniform in reaction and any attempt at standardization was unsatisfactory.

There were five diagnostic methods:

1. The use of the ointment of O.T. on a selected area of the body, which, if positive, gave a reaction of redness and tenderness.

2. The ocular instillation of the solution which reddens the conjunctiva.

3. Subcutaneous injection of tuberculin. This method has not been used extensively and attention has been called repeatedly to local, focal, and systemic reactions with the possible reactivation of old lesions.

4. The epidermal test of Von Pirquet, usually a small area of the epidermis of the forearm is denuded and a drop or two of the solution applied. The positive reaction is slight swelling and redness.

5. Intra-dermal or Mantoux test. A small needle is introduced between the dermal layers and approximately .1 cc of tuberculin injected.



The positive reactions is swelling and redness within thirty-six to forty-eight hours.

At the present time, the Mantoux test is considered the safest and most accurate of methods used. The Purified Protein Derivative of Tuberculin (P.P.D.) developed by Dr. Florence Seibert, of the Henry Phipps Institute under the sponsorship of the National Tuberculosis Association, has taken the place of Old Tuberculin. This new product is stable in a diluted form, exact as to strength and non-sensitizing. By its use, standardization of dosage, and technic make possible the collection of more reliable and complete information.

A number of comparative studies have been made as to the effectiveness in case finding of freshly prepared dilutions of O.T. and the two standard doses of Tuberculin (P.P.D.) Without exception, the authors of these studies have concluded that as a means of case finding, Tuberculin (P.P.D.) is eight to ten per cent more effective than Old Tuberculin. With the elimination of all extraneous proteins its specificity and accuracy is increased, obviating the possibility of false reactions. The method of administration is exactly the same as intra-dermal testing (Mantoux) with Old Tuberculin. The product is furnished in tablet forms and fresh solutions should be made as needed, which will remain potent if kept cold approximately three to four days. The test is read within forty-eight hours. Positive reactions are manifested by an area of swelling or induration which can be felt as well as seen. About the induration is usually seen a circle of erythema, which varies considerably in size. In order to record the degree of reaction, the area of induration can be measured in millimeters. A marked reaction called a four plus is characterized by the formation of a bleb with resulting necrosis in the center of induration. For diagnostic purposes the test may be read simply as positive or negative.

Twenty years ago it was thought that the majority of individuals were positive tuberculin reactors. At the present time, we do not find that to be true. The steady decline of the mortality rate indicating a decrease in the number of active contacts probably is the factor that has brought about this change. Sensitization to tuberculo-protein is produced only by the reaction of tissues of the body to the tubercle bacillus. An individual cannot become sensitive to tuberculin by any other means than a previous infection by the tubercle bacillus. An allergic state is founded, which, at present, is believed to be detrimental rather than protective to the tissues, when again the bacillus is encountered. The positive reaction; therefore means that the individual has had or does have a tuberculous infection. The

tuberculin test does not give information that will help us differentiate between latent and active tuberculosis. Early tuberculosis, we know produces no clinical symptoms. To be on the safe side, we must assume that the individual with a positive tuberculin reaction has minimal or incipient tuberculosis until proven otherwise. To arrive at a definite diagnosis, a period of observation together with an x-ray of the chest is indicated. The x-ray will tell us something about the size, location, and possible type of the tuberculous lesion. The plate will also serve as a standard for future comparisons by which we obtain our best measure of pathological change in the lung tissue.

The two important ages in tuberculin reactors is the child under six years and the teen age youngster. We realize the majority of children, who fall into this first group, will exhibit the childhood type of infection with calcified or healed lesions. Their danger lies not in the existing lesion but in continued or repeated exposure to the tubercle bacillus. These children must be protected from further contacts, which may bring about rapid pathological changes in already sensitized tissues. The younger the child, with a positive reaction, the more surely does it lead the physician into the home or among intimate contacts to locate the source of infection. Dr. F. E. Harrington, Commissioner of Health of Minneapolis, states that twenty-six per cent of the cases of adult type of tuberculosis now registered have come to their knowledge through follow-up work, originating with infected children discovered in routine tuberculin x-ray work. When once seen by the physician the child should not be forgotten but should be marked for future observation and x-rays, when he enters the dangerous teen age. It is in this group that we find the neglected child. One out of five positive tuberculin reactors are thought to show some evidence of clinical tuberculosis while in the teen age. Finding tuberculosis, during this period, is extremely important as the prognosis for complete recovery is good.

If we are to lower the sharp rise in the mortality curve, which takes place between the ages of fifteen to thirty, we must find tuberculosis before it finds us. There are two important methods we can use in finding tuberculosis.

First: Known contact examination. By this method we work from actual known active cases, finding and examining all contacts.

Second: Tuberculin x-ray method. Tuberculin testing large groups followed by x-ray of positive reactors.

The public school system undoubtedly offers the best opportunity for case finding by mass tuberculin

testing. As a result, millions of school children have been tested within the past three years. The intradermal or Mantoux test, using a little less than second strength (.0005 mgm) for a single dose survey, apparently gives the best results. In conducting such a survey the program must be built around at least four important factors.

Those are:

1. A well planned and carried out educational campaign for parents.

2. Uniform and efficient technic in giving and reading the test.

3. Persistent follow-up of all positive reactors getting them into the doctor's office.

4. Understanding and co-operation on the part of the physician seeing these children. Keeping in mind the objectives of this type of case finding.

In April 1937, in the Wichita schools, such a program as outlined above was followed, when

CHART 2

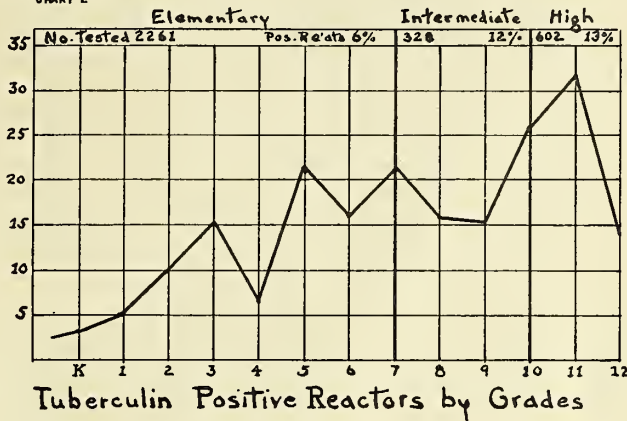
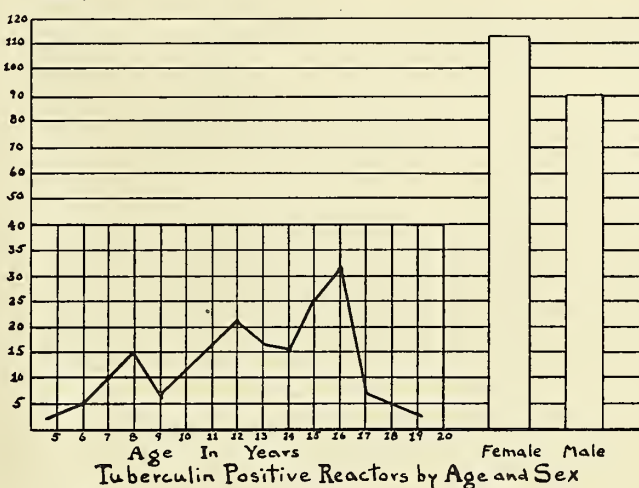


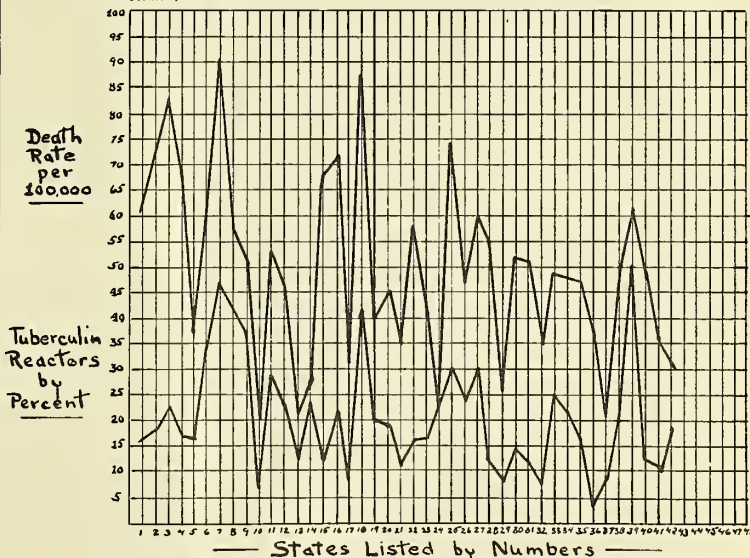
CHART 3



KEY TO CHART 7

1. Alabama
2. Arkansas
3. California
4. Colorado
5. Connecticut
6. Delaware
7. District of Columbia
8. Florida
9. Georgia
10. Idaho
11. Illinois
12. Indiana
13. Iowa
14. Kansas
15. Kentucky
16. Louisiana
17. Maine
18. Maryland
19. Massachusetts
20. Michigan
21. Minnesota
22. Missouri
23. Montana
24. Nebraska
25. Nevada
26. New Jersey
27. New York
28. North Carolina
29. North Dakota
30. Ohio
31. Oklahoma
32. Oregon
33. Pennsylvania
34. Rhode Island
35. South Carolina
36. South Dakota
37. Utah
38. Vermont
39. Virginia
40. Washington
41. Wisconsin
42. Wyoming

CHART 7



Comparison of Positive Tuberculin Reactors (School Children 1935) with Tuberculosis Death Rate 1937



over three thousand school children were tested. The positive reactors were carefully followed by letters and home visits by nurses, urging that the child be seen by the family physician. Record cards were filed on each case and every effort to obtain accurate and complete information was made. Specific information was sought which is serving us as a guide for our present program. Weak points are evident and those are being corrected as far as possible. The follow-up work was completed within the past several months and the data compiled. The results can best be seen through study of the following charts.

Chart 1: Outline of schools tested giving total number of students tested together with number positive and negative reactors.

Chart 2: Graph showing positive tuberculin reactors by grades. The sharp drop of the curve in the twelfth grade is due to a smaller number taking the test.

Chart 3: Distribution of positive tuberculin reactors by age and sex. Again the drop of the curve in the higher ages is due to fewer students of that age taking the test.

Chart 4: Summary of questionnaire.

Chart 5: A comparative study to show the distinct advantage of "Case Finding Surveys" over the older method of "Awareness of the Patients to Symptoms". Note the difference in minimal cases found.

Chart 6: A study of the present status of tuberculosis in Sedgwick County.

Chart 7: A comparison of positive tuberculin reactors taken from the National Survey of School Children in 1935 to the tuberculosis death rate of 1937. The states are numbered and can be identified from the key. There is a definite correlation.

CHART 1

RESULTS OF TUBERCULIN TESTS GIVEN IN  
WICHITA PUBLIC SCHOOLS—1937

	Negative	Positive	Total
North High School .....	143	24 15%	167
East High School .....	388	47 11%	435
Hamilton Intermediate .....	289	39 12%	328
Washington Elementary .....	45	5 10%	50
Waco Elementary .....	216	20 9%	236
Longfellow Elementary .....	116	9 8%	125
Harry Street Elementary .....	279	9 7%	288
Park Elementary .....	215	14 7%	229
Stanley Elementary .....	78	5 7%	83
Lincoln Elementary .....	201	11 6%	212
Fairmont Elementary .....	129	8 6%	137
Alcott Elementary .....	188	11 6%	199
Finn Elementary .....	116	4 4%	120
Irving Elementary .....	269	10 4%	279
Lowell Elementary .....	159	4 3%	163
Willard Elementary .....	137	3 3%	140

CHART 4

SUMMARY  
TUBERCULIN TESTING  
WICHITA SCHOOLS—1937

Total number of tests given: 3,191.  
Number of positive tuberculin reactors: 223 or 8%.  
Number leaving Wichita before survey completed: 14.  
Number unable to locate not attending public schools: 6.  
Completed survey: 203.  
Reaction of family:

Were parents interested in the test? .....	Yes	141	70%
Have a family physician? .....	Yes	114	56%
Did father or mother have tuberculosis? .....	Yes	34	16%
Did brother or sister have tuberculosis? .....	Yes	8	4%
Is there an active case in the home? .....	Yes	4	2%
Did a relative or close friend have T.B.? .....	Yes	33	16%
Immediate home contacts .....		20%	
Definite contact history .....		37%	
Reaction of family physician:			
Did a doctor see the child? .....	Yes	146	71%
Did the doctor approve of the test? .....	Yes	36	25%
Was child given a physical examination? .....	Yes	43	30%
Was an x-ray taken? .....	Yes	54	37%
Was treatment of any kind instituted? .....	Yes	36	25%
Did child complain of symptoms? .....	Yes	11	5%
Did child spend some time in bed under doctor's care? .....	Yes	13	9%
Diagnosed as active cases 4 or 1 in 36 positive tuberculin reactors seen by the physicians.			

CHART 5

COMPARATIVE STUDY

School Children Tuberculin Testing (National Survey 1935a).	
Tests given .....	1,124,363
Positive reactors ran from:	
South Dakota .....	4.6%
Virginia .....	51.7%
Detroit case finding <sup>b</sup> February 1-May 21, 1937.	
Tuberculin tests registered .....	33,367
Positive tuberculin reactors .....	7,472 or 22%
Completed x-ray study .....	5,122 or 69%
New active cases diagnosed .....	242 or 1 in 21 reactors
Classified as minimal cases .....	43%
Program which operates when patient is aware of symptoms.	
Consult a physician within three months after symptoms noticed .....	64%
Positive diagnosis made within three months after first visit .....	76%
Diagnosed as advanced cases .....	84%
Moderately active .....	14%
Minimal .....	2%
<sup>a</sup> Bulletin National Tuberculosis Association, July 1936.	
<sup>b</sup> Vaughn & Douglas, case finding work in tuberculosis J.A.M.A. Volume 109 No. 10 (Sept. 4, 1937).	
<sup>c</sup> Potter, B. P. Problem of Tuberculosis J.A.M.A. Volume 108 (May 8, 1937).	

CHART 6

Tuberculosis Sedgwick County—population 130,000.	
1937 cases reported to health departments .....	66
Dead when reported .....	21 or 31%
Duration over 5 years .....	12 or 18%
Duration between 1-5 years .....	20 or 30%
Less than 1 year .....	7 or 10%
Unknown .....	6 or 9%
1938 cases reported for first 3 mos. ....	11
Dead when reported .....	10 or 90%
Far advanced .....	1 or 10%
Mortality rate total deaths Sedgwick County Rate Kans. U. S.	
1937 .....	35 27 26.8 50.7
1936 .....	28 28.7 51.6
1935 .....	41 31 28.9 51.8
1927 .....	39 38 35.1 81

SUMMARY

1. Tuberculin in the P.P.D. form is an effective, accurate, and harmless diagnostic agent in the finding of tuberculosis.

2. The Mantoux test or the intra-dermal method of testing, is the method of choice.

3. Sensitization to tuberculo protein is possible only through previous tuberculous infection.

4. The positive tuberculin test is the first step in the diagnosis of active tuberculosis in mass case finding surveys.

5. The danger of the childhood type of infection does not lie in the lesion produced but rather in the allergic state, which will result in an intense reaction with tissue destruction upon exposure to continued or single massive doses of tubercle bacilli.

6. The physician with the best interests of the child in mind will look into the home to find and eliminate sources of exposure.

7. A period of observation and x-ray study is desired on all positive reactors.

8. To lower the high mortality rate in the fifteen to thirty year age group active case finding by group tuberculin testing is warranted.

9. The average individual who becomes aware of symptoms and seeks the physician is diagnosed as far advanced tuberculosis.

10. Without understanding and cooperation on the part of the physician any plan for the finding of early tuberculosis will be unsatisfactory.

## REFERENCES

- Law (American Journal Diseases Child 53: 1220, 1937).  
 Plunket and Siegal (American Rev. Tbc. 35: 296 1937).  
 Crimer al (Absts Papers presented at 33rd annual meeting of N.T.A. Milwaukee, 1937).  
 J. Arthur Myers (Medicine Today Vol. I, March 1938.)  
 Emerson (Am. J.P.H. June 1935).  
 Long and Seibert (Am. Rev. Tbc. 35:281-295 March 1937).  
 Masters (Diseases of Chest, Vol. II, Sept. 1936).  
 Spector: (Absts. Address Columbia, Mo. Oct. 1, 1936).  
 Tyson: (Journal American Medical Association, Vol. 109 Sept. 4, 1937.)  
 Hall: (Abst. Paper presented H.O. and P.H.N. Meeting April 1936, Topeka, Kans.  
 Report Survey Tbc. testing Bulletin N.T.A. July 1936.  
 Report United States Public Health Service Bulletin Vol. 53, No. 5, February 4, 1938.

## ABSTRACTS

Treatment of acute non-specific arthritis by fever therapy. The authors present a series of twenty cases of acute non-specific infectious arthritis treated by artificial fever therapy by use of the Kettering Hypertherm. Twelve of the patients (sixty per cent) received two to twenty-five hours (average 7.3) of fever above 105 degrees F. and made complete prompt recovery and were cured clinically. Eight of the patients (forty per cent), who showed much more x-ray evidence of joint erosion, were given five to thirty hours (average seventeen hours) of fever at 105 degrees F. and were only partially relieved symptomatically. The authors stress the importance of diagnosis and treatment of acute non-specific infectious arthritis while in the early stage particularly before onset of joint erosion. The benefit of fever therapy in this disease is not bactericidal but raises the patient's immunity.—Leland F. Glaser, M.D.

Stecher, Robert, M.D., and Soloman, Walter, M.D.: The Treatment of Acute Infectious Arthritis of Undetermined Origin With Artificial Fever: The American Journal of Medical Sciences: 194: 4:485; October, 1937.

Value of fever therapy in the arthritides. Of nine cases of acute rheumatic fever with active endocarditis, six became inactive in an average of twenty-four days, following an average of five fever treatments. Three cases of acute rheumatic fever with active endocarditis and complicated by chorea became inactive in an average of nine fever treatments.

Of twenty-three cases of gonorrheal arthritis, eighty-two per cent were cured or markedly relieved after an average of twenty-six hours of fever maintained between 106 and 107 degrees F. A minimum of twenty-five hours of fever maintained at this level is necessary before concluding this therapy a failure. It is the best type of therapy to date and should be instituted early.

Fever therapy is a valuable adjuvant, along with dietary, supportive, and orthopedic measures, in the treatment of atrophic arthritis. This combination of treatment was of

benefit in seventy-five per cent of patients treated.

Hypertrophic arthritis is benefited by artificial fever therapy only in those cases where there is superimposed a traumatic and infectious element.

The beneficial effects of fever therapy in the arthritides, with the possible exception of gonorrheal arthritis, are in all probability not solely bactericidal, but rather the result of the beneficial effects of vasodilatation and increased immunologic response.—Leland F. Glaser, M.D.

Simons, E. E., M.D.: Value of Fever Therapy in The Arthritides: American Journal of The Medical Sciences: 194:2:170: August, 1937.

A total of two hundred and fifty-nine fever treatments were administered to forty-nine patients; thirty cases of known gonococcal infections, five cases of suspected gonococcal infections, eight cases of syphilitic infections, four cases of rheumatoid arthritis, one Sydenham's chorea, and one for sarcoid.

Proven gonorrheal infections: (1) in six cases of G.C. urethritis and prostatitis who were given from five to seven fever treatments each (five hours each treatment of 106-107 degrees F.), four patients showed a negative smear after the completion of fever sessions. In three of these cases, the infection was acute and two of them the signs and symptoms of the infection had completely disappeared after fever treatment. (2) Three patients with acute exacerbations of chronic salpingitis were given about twenty-five hours of fever of 106-107 degrees F. The smears became negative in all three cases after completion of treatments. (3) Acute arthritis: Six cases of acute arthritis of less than four weeks duration were given about twenty-five hours of fever of 106-107 degrees F. Five recovered completely and one improved moderately. (4) Ten patients with chronic arthritis of more than four weeks duration were given about thirty hours of fever of 106-107 degrees F. Following this course of fever treatments all evidence of active infection of the joints disappeared in every case and in two the ankylosis disappeared. (5) Gonococcal endocarditis: two cases of proven G. C. infection died following fever therapy and one probable case recovered. At autopsy of one patient, the blood culture was sterile.

Probable gonococcal infections: In five patients with this diagnosis, three completely recovered following fever therapy, one was symptomatically improved, and one failed to improve.

Syphilitic infections: These patients were treated with hyperpyrexia combined with nearsphenamine. Five cases of general paresis: two showed complete clinical remission following fever, two showed marked improvement, and one showed slight improvement. Two patients with meningo-vascular syphilis experienced marked symptomatic improvement and complete serologic reversals. One patient with tabes showed symptomatic improvement.

Rheumatic arthritis: Four patients with rheumatoid arthritis were treated by hyperpyrexia. Each showed symptomatic and objective improvement during the course of treatment, but all relapsed within a few weeks after its termination.

Sydenham's chorea: One patient treated by twenty-five hours of fever of 105-106 degrees F. Chorea movements after second treatment had disappeared and the signs of heart disease disappeared six days after last fever treatment.

Leland F. Gleaser, M. D.

Williams, Robert, M. D.: Results Of Pyretrotherapy At The Vanderbilt University Hospital: Southern Medical Journal: 30:11: 1080-1084, November, 1937.



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

We learned at the A. M. A. Convention at San Francisco, that ten of the leaders of the A. M. A. had been invited to participate in the National Health Conference which the President had called for July 18th, at Washington.

The House of Delegates believing this a progressive step, accepted, hoping of course to get a better break than business has in its negotiations with the present governmental agencies.

This has taken place and instead of free participation, they found the conference packed with others who are known to favor the further invasion of medical practice by government. There is one thing evident, that A. M. A. cannot save us or medicine unless we get on the firing line ourselves. If we are willing for professional politicians to carry this problem through, the doctors will certainly find themselves in a secondary position.

It would seem, since there is a proposal to have Congress pass some kind of medical law "to take care of all the people", assisted by those lined up with the government, that there should be a spirit of helpfulness to reach some compromise. We certainly do not want the chaotic condition existing in Europe.

State societies and county societies must be on the alert, and as much as we dislike dabbling in politics, it would seem pertinent that we become better acquainted with our Congressmen and Senators, and enlighten them further on this important subject that will effect the American people as a whole more than the medical profession itself.

N. E. Melencamp, M.D., President.

---



---

## EDITORIAL

---



---

### GEORGE M. GRAY—A TRIBUTE

On the stormy tempestuous night of March 4, 1856, in the little town of Waukegan, Illinois, George Gray first opened his eyes on the light of day and announced with a shrill cry that he had come to stay, and that likewise his lungs were in perfect condition.

The old midwife at the birth couch said the boy was exceedingly well favored, born with a caul and with his little fists doubled up as if eager at once to fight the battles of life, and to prove that he would be among the survival of the fittest.

The infant grew and thrived amazingly. When two years of age his father emigrated to Kansas, where he established a home upon a small fruit farm, near Quindaro. Here George spent his boyhood days assisting his father with the farm work and attending school.

While convalescing from a severe attack of typhoid fever in his late teens, he resolved to quit school and take up the study of medicine.

At that time it was deemed essential to study pharmacy before entering a medical college. With that plan in view he secured a position in Dr. T. J. Eaton's drug store at 817 Main Street, in Kansas City. Dr. Eaton was Professor of Chemistry in the College of Physicians and Surgeons, a man of marked ability in his profession, which was a most fortunate beginning for the boy, as under his tutorage George proved to be an adept scholar and soon learned the rudiments of the drug business. He began by washing bottles and wiping dust from the jars that were seldom used. He removed the dirt from the stem of the funnels, and pounded the arnica flowers, and other crude drugs in the large iron mortar with vigor. Within a year he was permitted to make the tinctures, elixirs, various syrups and other preparations then in use. It was said, when he cleaned the mortars and graduates "Their polished surfaces reflected back his earnest features."

It was here among these surroundings he first saw the maiden who was to make the whole world over for him. George had secured room and board

in the home of Mrs. Minerva Harlan, a widow with one daughter, who lived near Eleventh and Walnut Streets, and there it was he came upon this divine creature carelessly swivngng her sunbonnet in one hand and her books held by a strap in the other, sauntering along heartloose and fancy free on her way to school. Caroline Harlan was then scarcely fifteen years old, and even at this early age she gave promises of the beauty which was to crown her riper years. Her long dark hair hung down her back in two heavy braids, which seemed to George to catch all the sunlight as she passed and imprison it in its silken meshes. Their acquaintance progressed and soon ripened into a firm and lasting friendship, and often in the following years, during the summer season, they would seek the shade of an old apple tree in his father's orchard and there hand in hand sigh out their hearts, whisper sweet nothings, and form their plans for the fair future.

When off duty for an evening Caroline would charm George with the popular songs of that day played in low dulcet tones upon her guitar, as she was an accomplished musician. She dazzled him with her large brown eyes as she "looked down to blush, and up to sigh."

In the fall of 1876 George matriculated in the College of Physicians and Surgeons. It was customary at that period for a medical student to study under the direction of a preceptor. Here again fortune favored George, for while attending to his duties in the drug store he had the opportunity to become acquainted with many of the foremost physicians in the city. Among them was the dignified and distinguished Dr. E. W. Schauffler, who had become interested in the young drug clerk and advised him to study medicine, and it was largely through his influence that he did so, especially since Dr. Schauffler, who was professor of the theory and practice of medicine in the college, offered to be his preceptor.

Due to the fact he promised Dr. Eaton to continue the manufacture of his shelf preparations while studying medicine, he took a three-year course and was graduated with the Degree of Doctor of Medicine in March, 1879.

Still desiring more knowledge in his chosen profession he went to New York and entered Bellevue



Hospital Medical College in September, 1879, and was graduated from that institution in April, 1880.

Returning to Kansas City, Kansas, he began practicing medicine, and as the years rolled on his knowledge of and ripe experience in surgery gained him fame throughout the state as a diagnostician and operator.

On November 23, 1881, George and Caroline pledged their troth in a quiet home wedding and went directly to Wyandotte to establish their own little love nest.

In April, 1887, Dr. Gray was instrumental with the Very Reverend Monsignor Anthony Kuhls in founding St. Margaret's Hospital, and so long as it is operated under the guidance of charity it will stand as an imperishable monument of these two great men.

Dr. Gray not only attended the first patient in this institution but has been the guiding spirit of its medical and surgical staff throughout all these years, and at present is still Chief of the Surgical Staff.

He is a past president of the Wyandotte County Medical Society and The Kansas Medical Society, also the Kansas City Academy of Medicine; a member of the Kansas City Southwest Clinical Society, the Western Surgical Association, American Medical Association, and a fellow of the American College of Surgeons.

He served with distinction as County Physician, Coroner, President of the Chamber of Commerce, and Mayor of Kansas City, Kansas.

From 1895 to 1905 he was demonstrator of and lecturer on anatomy at the Kansas City Medical College. Since 1905 he has been Professor of Clinical Surgery at the University of Kansas School of Medicine.

He was the first physician in the city to use the O'Dwyer Intubating tubes to relieve children suffering from diphtheritic croup. Dr. J. F. Binnie honored him in his Text Book on Surgery by quoting his method of operation for prostatectomy, infected wounds of the hands and the care of the stump following appendectomy.

He made it a rule to devote one-fourth of his time to the treatment of charity cases.

He has always adhered to the humane principle of his profession during these many years, and

abhors the present tendency of some physicians to commercialize this honored calling. "His restless eyes were ever open for truth, his unsatisfied spirit sought relief in new discoveries"; he believed in independent meditation, and original observation.

Always scrupulously ethical he showed himself a true physician by his sympathy and concern for all his patients, and to be closely associated with him was to be near the altar of the "Temple of Truth."

He rendered distinguished voluntary services to the government of the United States during the World War, for which he received the grateful acknowledgement and appreciation from the Kansas Council of National Defense in the name and in behalf of the people of the state.

On March 5, 1929, he was the guest of honor at a banquet given at the Grund Hotel by his friends and fellow members of the faculty of the University of Kansas, in celebration of his fifty years of medical practice. As a token of esteem and in commemoration of this event the faculty presented him with a gold watch.

It was practically due to his individual effort, while Mayor, that Kansas City, Kansas, has its present efficient water system.

He has been for many years a consistent member of the Masonic Order, belonging to both the York and Scottish Rites, as well as the Shrine.

On November 23, 1931, Dr. and Mrs. Gray celebrated their golden wedding day. May the anniversary oft return, and may each mark the closing of a fiscal year with health, happiness and plenty. May the good husband never see on her the imprint of time, but ever deep within her soul behold the sweetheart of his boyhood days. May the good wife never note a faltering step, nor a crown of silvery grey, but ever in him behold the stalwart lad who wooed and won her in the days gone by.

Today you can look backward through the vista of eighty-one years and realize that life to you has been richer far than fairest dreams of youth. May it continue to be as "One purple day in Summer," with never a grey one to mar its beauty, and may the mystic curtain of the future reflect naught but rosy hues.

History reveals that every great man had a great mother. Probably the finest tribute ever paid to

motherhood came from the lips of that great Emancipator Abraham Lincoln, who said, "All that I am, and all that I expect to be, is due to the influence of my good Mother."

From the success Dr. Gray has achieved and the various honors he has had bestowed upon him as a surgeon, teacher and representative citizen, I am of the opinion that he likewise had an exceptional mother.

His creed of life may be summed up in the following lines by Linneus Banks:

"I live for those who love me  
For those who know me true,  
For the heaven that smiles above me  
And awaits my spirit, too;  
For the cause that lacks assistance,  
For the wrong that needs resistance,  
For the future in the distance,  
And the good that I may do.  
I live to hail that season  
By gifted ones foretold,  
When men shall live by reason  
And not alone by gold;  
When man to man united  
And every wrong thing righted,  
The whole world shall be lighted,  
As Eden was of old."

So when the spirit of surgery calls the honor roll of states, that have served with distinction—KANSAS—"can answer in a triumphant voice"—for

GEORGE M. GRAY  
was her adopted son.

Owen Krueger, M.D.

## HEAT SICKNESS

Seasons of intense heat renew general interest in the effects of heat on the physiology of the human body. Not new, either in the harvest field or in industry, where large numbers of workers are subjected to high temperatures, are acute illnesses attributed to excessive heat or to the drinking of unwise amounts of water. Dizziness, weakness, palpitation, nausea and vomiting, headache and "inward nervousness" are common complaints. So-called heat cramps are a well known industrial hazard, and have

been no great rarity amongst workers in the harvest fields, more especially amongst "green hands". For generations, in some parts of the country, salty oatmeal water or beer have been accredited as effective for prophylaxis and treatment of heat cramps. In 1923, Moss and later Brockbank reported that extreme muscular cramps in workmen who perspired freely and drank large quantities of water were relieved at once by drinking salt water.

It has been shown that a healthy man or woman in strenuous exercise may lose as much as two to five pints of fluid per hour through perspiration. Perspiration is approximately one per cent sodium chloride. In addition salt is lost in the urine. Thus, in extreme cases there might be a loss of from forty to fifty grams of sodium chloride daily. A one-hundred and fifty pound man has approximately thirty-five grams of sodium chloride reserve. The average daily intake in our American diet is approximately twenty grams. It is evident then that it is possible through excessive perspiration to seriously and dangerously deplete the sodium chloride reserve of the body.

To support the foregoing clinical observations that suggest a close association between water balance and the blood chlorides, some interesting experimental work has been done. Round-tree, in working with a group of patients suffering from diabetes insipidus, noted that those patients who had been in the habit of consuming eight to ten liters of water by mouth daily without untoward effects suddenly developed headache, nausea, asthenia, incoordination and a staggering gait when given pituitary extract without first reducing the fluid intake. This led him to administer large quantities of tap water by mouth to healthy experimental animals. He was able to cause a definite and consistent series of symptoms characterized by asthenia, followed by muscular twitching, convulsions, salivation and finally death, which he believed to be due to water intoxication. Since these animals could be relieved of their symptoms and, in fact, saved from death by the administration of salt solution, he concluded that the pathogenesis of the intoxication was probably due to an upset in the salt-water balance. In all of his animals dying of water intoxication, Roundtree felt that death was due to cerebral edema.



More recently Helwig, Schutz and Curry enlarged upon Roundtree's work using healthy young rabbits to whom they gave large quantities of tap water by rectum. The picture of water intoxication was consistently produced. Chemical determinations revealed a constant decrease in the blood chlorides ranging from one hundred to two hundred and forty points. There was likewise a reduction of chloride in all of the tissues of the body save the liver. The greatest decrease was in the brain. Here a striking interstitial edema was present, probably accounting, in the opinion of the authors, for the fatal central nervous system symptoms.

Many large industrial plants are making available tablets of salt, which are to be taken along with drinking water. This is a simple and intelligent prophylactic measure and might quite as successfully be applied on the farm as in industry.

---



---

## CANCER CONTROL

---



---

### CANCER OF THE STOMACH

G. A. Westfall, M.D.

Halstead, Kansas

Cases that must have been cancer of the stomach have been described since the beginning of medical history, but it was not until the 16th Century, when the profession began to do postmortems that the true nature of the disease was recognized. Morgani in 1761 wrote the first comprehensive description of the condition although several cases had been known before. Since then we have learned many facts about gastric malignancies, yet today it is very nearly an incurable disease. One-fourth of all cancer deaths are due to carcinoma of the stomach. However in the last decade there has been marked improvement in surgical technic and diagnostic procedure and it is evident that many cures are possible in certain types of malignancy—but we must get them early enough.

The most commonly recognized stomach malignancies are:

1. Adenocarcinoma, usually located near the pylorus. They grow quite large before they ulcerate and produce many symptoms.

2. Mucoïd carcinoma. In this type there is a replacement of mucus in the cells. They are usually near the pylorus and infiltrate all coats of the stomach.

3. Medullary carcinoma. They occur more frequently around the cardia and in the fundus. They metastasize early.

4. Scirrhus carcinoma. They develop slowly near the pylorus and seldom ulcerate. There is a general thickening of all the walls.

5. Carcinoma following ulcer. This type of cancer is a very debatable subject. Pathologist's statistics vary as much as from two to fifty per cent of cancers arising from old ulcers. Ewing believes that many pathologists confuse inflammatory changes with true cancer cells. Probably from five to ten per cent of stomach cancers do originate in an old ulcer. They are of the adenomatous type.

6. Linitis plastica or leather bottle stomach is very similar to scirrhus carcinoma. They are probably made up of short life cancer cells which do not readily metastasize but destroy the stomach cells, replacing them with fibrous tissue.

Dr. Hertzler contends that, to the surgeon, all a classification needs to show is whether the lesion is circumscribed or diffuse and whether it has metastasized.

One of the unfortunate facts of stomach malignancies is the fact that they produce so few and indefinite symptoms until they ulcerate. The early symptoms are always inadequate and frequently misleading. Many times there are no symptoms at all until a well advanced lesion has developed. Naturally the symptoms depend on the location of the lesion and the type of malignancy at hand. Nevertheless there are certain classical symptoms and signs that are indicative of stomach cancer. These we should all be familiar with. It occurs nearly twice as frequently in men as in women.

It is quite common that the constitutional symptoms will be the first noted by the patient. Loss of weight without any manifest cause, in a person within the cancer age, is always justification for a very careful gastro-intestinal study, even if there is no dyspepsia. Pallor and anemia are usually early signs and may be the only ones present. With either of these two symptoms there is always loss of strength. This seldom occurs as a single symptom.

The local symptoms appear somewhat later. Loss of appetite is frequently the first noted, which is referable directly to the gastro-intestinal tract. However, I have seen a few cases that maintained a good appetite until pyloric obstruction occurred. Loss of

appetite accompanied with weight loss should always be a danger signal. The next symptom that usually appears is a mild dyspepsia which is progressive and at first selective. Unfortunately at first the dyspepsia is frequently relieved for several weeks with treatment. This fact has misled us all many times, and were it not so, many cases would be diagnosed sooner. Any dyspepsia developing in a person beyond middle life has the possibility of malignancy as its cause and this we should never forget. This is especially but not necessarily true if there is no history of previous chronic gastric disturbance. Aerophagia is not a very common complaint of cancer, but occasionally this symptom will be the first complaint. It is true that people with aerophagia have a neurotic makeup, but we are finding more and more organic irritations along the gastrointestinal tract to precipitate the habit.

Three-fourths of all gastric malignancies will eventually ulcerate and a few will develop on an old ulcer. In either case, a cancer may cause symptoms similar to an ulcer. Pain—food—relief. This is best differentiated by frequent x-ray studies. A crater of an ulcer on strict management will in a short time diminish in size. If it does not it should be explored. Vomiting is more apt to occur early in cancer and late in ulcer. Dysphagia may be an early symptom but only if the lesion is near the cardia. Hemorrhage develops late but may be the first thing that alarms the patient sufficiently for him to seek medical advice. Perforation occasionally occurs unexpectedly as in ulcer but not nearly so frequently. Actual pain is always a late symptom and indicates ulceration. Symptoms of metastasis are heavy or full feeling in the region of the liver. Later there is hard nodular enlargement with jaundice. Palpable glands, especially Virchow's glands in the supraclavicular space, peritoneal spread and ascitis, bone pain, brain symptoms, pleural rub and later rales and fluid in the chest, all indicate metastases.

The diagnosis of early cancer of the stomach is as difficult as the diagnosis of late cancer is easy. If however we use what knowledge we have of the disease and work up our cases more thoroughly we will continually be able to make more presumptive diagnoses of early cancer. There is nothing in the history of a case that is entirely characteristic but if one will note sudden changes in digestive symptoms, loss of weight and strength without cause, many cases can be discovered. A man may have indigestion for years with more or less the same complaints and then suddenly develop an entirely different set of gastric complaints such as occasional vomiting, failure to get relief from previous remedies, loss of appetite, where he presumably had

hunger pain or the character of the distress changes. More frequently he will develop a slowly growing but persistent indigestion with a history of no previous gastric symptoms. All these point to the beginning of malignancy.

Gastric analysis is of help. Nearly all carcinomas have low acidity and most of them have no free hydrochloric acid. However we have had several cases with free hydrochloric acid of fifty to sixty per cent. Lactic acid and Boas' apple bacillus are found in late cases of malignancies.

The persistent finding of occult blood in the stools on several examinations is a very valuable diagnostic aid. The patient must be on meat-free diet for several days.

Fluoroscopic examinations and x-ray films are the most valuable help we have for making a diagnosis. Very few lesions are missed by men familiar with this work. The exact nature of the lesion if early may be confusing but a study of the rugae, the peristaltic movements and of filling defects will nearly always reveal a lesion. A few cases where the lesion is near the cardia and has not penetrated the mucosa will be missed. If lower in the stomach most of them will be found.

On account of the so frequent uncharacteristic history of symptoms and the unreliability of other diagnostic procedures, the best medical men can do clinically is to make a presumptive diagnosis of early carcinoma of the stomach. Then if x-ray does not give us a satisfactory diagnosis, they should be explored by a surgical pathologist. Dr. Hertzler likes to remark that the diagnosis of early cases must be made at the surgical table with the tissue in hand. This can be done only if the surgeon has a comprehensive knowledge of the gross pathology.

A few of the other pathological lesions of the stomach that cancer must be differentiated from are as follows:

1. In early cases ulcer is probably the one that confuses most as each can simulate the other in nearly every symptom. Ulcer is more apt to occur in early subjects. Especially the first symptoms of ulcer nearly always begin at a younger age. The location of the lesion is of help. Cancers are more frequent on the greater curvature. The lesions that confuse are at the pylorus and in the prepyloric area. These lesions have to be watched carefully. Of course an ulcer is more prone to form a niche or crater while a cancer will have a filling defect. Cancer defects are usually larger than ulcers. At the beginning of treatment gastric ulcers should be rechecked by x-ray frequently. The size of the lesion will always



diminish in a comparatively short time if on good treatment. If they do not, they should be explored. Gastric analysis helps to differentiate the two.

2. Benign tumors of the stomach are rare. They give a round smooth defect on the x-ray film. They should all be explored.

3. Syphilis of the stomach is sometimes diagnosed as cancer but is easy to differentiate if thought of. A Wassermann should be done. The defect on the x-ray film of a syphilitic stomach is out of all proportion to the symptoms produced. The patient is very shortly relieved by treatment but the defect in the stomach remains.

4. Sarcomas are very rare and usually give the appearance of protruding into the stomach. They look more like benign tumors.

5. Occasionally an old ulcer will have a slow perforation, producing a perigastritis. This will cause a large filling defect which has the appearance of an inoperable carcinoma. I have had two of these cases. One I gave a hopeless prognosis and put him on a palliative treatment. He returned four years later with a friend who really had an inoperable carcinoma, for me to cure.

6. Papillomas of the stomach are not very frequent but many become malignant. They should be explored.

7. There are a few of the constitutional diseases that might be confused with carcinoma of the stomach clinically. Goiter, pernicious anemia, diabetes and old fibrotic tuberculosis are the most common ones. A careful examination will readily reveal the true nature of these conditions.

The treatment of early cases is always surgical. All cases not involving the cardia, where there is the least doubt of their operability, should be explored. Resection should be done where the lesion is circumscribed and there is no metastasis. It is the only hope for a cure. The type of operation must depend on the case at hand and the preference of the individual surgeon. The Polya modification of the Billroth II seems to be the most popular at present.

If the case is inoperable we have only one duty and that is to make the patient as comfortable as possible. If there is obstruction a gastro-enterostomy will give much relief. The patient should be fed small amounts and at frequent intervals. Acids are not tolerated well and frequently alkalis will relieve the dyspepsia.

Bismuth subnitrate and kaolin relieve burning

sensations. For the pain, opiates should be given, without paying any attention to addictions. As a matter of fact I believe it is a very good thing for them to acquire the morphine habit. It relieves their mental distress.

The story of stomach cancer still must be written in a pessimistic mood. Yet in the last decade many clinics have reported several three to five year cures after resection. We have had one case that lived ten years after operation, and many others are reported.

Admitting that the length of life depends more on the type of cancer than the treatment we have at present, nevertheless, we should be constantly watching for these cases and get them to the surgeon as soon as possible. By no other means will the knowledge of the subject be increased.

---



---

## EYE, EAR, NOSE & THROAT

---



---

### TREATMENT OF THE COMMON COLD

Lyle S. Powell, M.D.

Lawrence, Kansas

Of all the ailments that fall to the lot of man, the common cold is said to cause more disability than any other single disease. Considerable judgment must at times be exercised to determine the type of cold. Rather, perhaps, whether the condition is one of the apparently infectious type which is passed from one individual to another, or whether it is a recrudescence of a pre-existing, quiet infection such as naso-pharyngitis or sinusitis. It is obvious that no single treatment is efficacious in every instance. However, any worthy addition to the armamentarium of the practicing physician increases his ability to abort this disease and circumvent the dire complications that may result.

In the acute ascending phase of a cold, local treatment is usually not efficacious and may be actually harmful. It seems reasonable to assume that the reactions in the nose, throat and sinuses are nature's effort to control the situation locally. Following this line of reasoning, the use of constricting, irritating drugs in this phase, while perhaps giving momentary relief of symptoms, circumvents a large part of nature's effort. The congestion of the tissues of the upper respiratory tract is purposeful, as is the edema, weeping and loss of fluid, the increased leukocyte count and the elevated temperature.

The use of vaccines in the prevention and treatment of colds is not new. Considerable disappointment has been experienced by most physicians in the use of vaccine, especially in the treatment of colds. The usual stock vaccines which are prepared for sub-cutaneous use have been found to be of rather doubtful value. It has been thought that perhaps these vaccines were not sufficiently potent, and the killed bacteria count has been increased several fold with the idea of increasing the general reaction. No untoward symptoms were encountered in this procedure, but the results were very little if any better than with the usual stock vaccines. Then it was realized that the skin is probably the greatest immunological organ of the entire body. Intradermal injections of the more potent vaccine produced much better results, both in the prevention and treatment of colds. There is less local reaction and greater systemic reaction. The systemic reaction is more sustained, probably due to the slower absorption of the vaccine. This reaction takes place without the violent aching and discomfort occasioned by the sub-cutaneous injection of the vaccine.

Following the work of Jarvis, of Barre, Vermont, and his biochemical co-workers, the use of oxidizing catalysts in the treatment of colds has made a most notable addition to the treatment of this disease. For more than two years insulin has been used with favorable results in a large percentage of cases. When given in three-unit doses three days in succession, it has been found to abort the great majority of colds of the apparently infectious sort. No untoward results of any kind have been noted in a very large number of cases. For many months five units of insulin were given each day for three days without any unfavorable reactions, but following a personal conversation with Jarvis, his dosage of three units was adopted and has seemed just as efficient as the larger dosage. Apparently all that is needed in many cases is a slight acceleration of nature's efforts and the cold is completely controlled locally. There is a slight speeding up of metabolism and catabolism which produces the desired effect.

Another drug that apparently acts as an oxidizing catalyst which has been found very useful in the treatment of the common cold is dilute hydrochloric acid. Five drops of dilute hydrochloric acid in about one-fourth glass of water are taken three times a day when the stomach is empty. The stimulating effect of this small dosage can be felt by most persons almost immediately and when used in conjunction with insulin apparently increases the number of favorable results.

---

## MEDICAL ECONOMICS

---

### MEDICAL SCHOOL REPORTS

In November 1937 a questionnaire was prepared by the Committee of the School of Medicine and sent to the various Medical Schools in the United States in order to determine how many schools were offering courses in Medical Economics and/or The Art of Medical Practice.

This questionnaire was worded as follows:

Does your school offer courses in medical economics and/or the art of medical practice? If so, we would appreciate a description of the nature of the courses, how they are conducted, the interest they receive, your opinion as to their practicability, and any other information you can give.

Sixty-two medical schools replied to the questionnaire. In the table below is listed the names of the schools, addresses of the schools, and an indication as to whether their replies were yes, no, or as in many instances a qualified answer stating that no formal course was presented as such but information along these lines were available to the medical student.

The prevailing opinion of the administrators of the medical schools was, that information along these subjects should be available to the medical student in his junior or senior years, but the difficulty was (a) in finding time to include such course in the already crowded schedule of the medical curriculum, and (b) in finding capable and/or willing instructors to present the subject. In some instances there were evening seminars where the student could receive this information. In many instances the subject was presented as extra curricular and attendance was elective. Seven or eight of the schools that answered "No" offered only the first two years of medicine and of course these students were not far enough advanced in medicine to appreciate the value of such a course.

It is not practical in this report to include all answers in detail but a few varied replies are submitted.

(1) "Not as such, but they receive incidental discussion from time to time in various courses by different individuals. It is not practical to include in the medical course a good many things that are important to the graduate. The function of the medical school is to inculcate thoroughly knowledge of the fundamentals of medical science and their application; this to be further supplemented by hospital experience."



Name of School	Address	Yes	No
Western Reserve University Medical School.....	Cleveland, Ohio.....		No
New York University Medical School.....	New York, N. Y.....		Qualified
University of Vermont Medical School.....	Burlington, Ver.....	Yes	
Cornell University Medical School.....	Ithaca, N. Y.....		No
University of California Medical School.....	San Francisco, Calif.....	Yes	
Wayne University College of Medicine.....	Detroit, Mich.....	Yes	
University of Chicago Medical School.....	Chicago, Ill.....		Qualified
Albany Medical School.....	Albany, N. Y.....		Qualified
Long Island School of Medicine.....	Brooklyn, N. Y.....	Yes	
Columbia University College of Physicians and Surgeons.....	New York, N. Y.....		Qualified
University of Kansas Medical College.....	Kansas City, Kans.....	Yes	
Syracuse University School of Medicine.....	Syracuse, N. Y.....	Yes	
University of Illinois School of Medicine.....	Chicago, Ill.....	Yes	
University of Oklahoma School of Medicine.....	Oklahoma City, Okla.....	Yes	
University of Iowa School of Medicine.....	Iowa City, Iowa.....	Qualified	
Georgetown University School of Medicine.....	Washington, D. C.....	Yes	
University of Pennsylvania School of Medicine.....	Philadelphia, Penn.....	Yes	
University of Cincinnati College of Medicine.....	Cincinnati, Ohio.....	Yes	
University of Southern California School of Medicine.....	Los Angeles, Calif.....	Yes	
Harvard University Medical School.....	Boston, Mass.....		Qualified
Hahnemann Medical College.....	Philadelphia, Penn.....	Yes	
Marquette University School of Medicine.....	Milwaukee, Wis.....	Yes	
Medical College of the State of South Carolina.....	Charleston, S. C.....		Qualified
University of Wisconsin Medical School.....	Madison, Wis.....		Qualified
University of Colorado School of Medicine.....	Denver, Colo.....		Qualified
Creighton University School of Medicine.....	Omaha, Neb.....	Yes	
Ohio State University College of Medicine.....	Columbus, Ohio.....	Yes	
University of North Carolina School of Medicine.....	Chapel Hill, N. C.....		No
Emory University School of Medicine.....	Atlanta, Georgia.....		No
University of Nebraska College of Medicine.....	Omaha, Neb.....		Qualified
Yale University School of Medicine.....	New Haven, Conn.....		No
University of South Dakota School of Medicine.....	Vermillion, S. D.....		No
Loyola University School of Medicine.....	Chicago, Ill.....		No
University of Alabama School of Medicine.....	University, Alabama.....		Qualified
John Hopkins University School of Medicine.....	Baltimore, Maryland.....		Qualified
University of Georgia School of Medicine.....	Augusta, Georgia.....		No
Duke University School of Medicine.....	Durham, N. C.....		Qualified
Womans Medical College of Pennsylvania.....	Philadelphia, Penn.....		Qualified
New York Medical School.....	New York, N. Y.....		Qualified
University of Michigan School of Medicine.....	Ann Arbor, Mich.....		Qualified
University of Louisville School of Medicine.....	Louisville, Ky.....		No
Meharry Medical College.....	Nashville, Tenn.....	Yes	
Medical College of Virginia School of Medicine.....	Richmond, Va.....	Yes	
University of Minnesota School of Medicine.....	Minneapolis, Minn.....		No
West Virginia School of Medicine.....	Morgantown, W. V.....		No
University of Mississippi School of Medicine.....	University, Miss.....		No
University of Utah School of Medicine.....	Salt Lake, Utah.....		No
Tulane University of Louisiana School of Medicine.....	New Orleans, La.....		Qualified
Vanderbilt School of Medicine.....	Nashville, Tenn.....		Qualified
Jefferson Medical College of Philadelphia.....	Philadelphia, Penn.....		Qualified
Baylor University College of Medicine.....	Dallas, Texas.....		Qualified
University of Maryland School of Medicine.....	Baltimore, Maryland.....		Qualified
University of Rochester School of Medicine.....	Rochester, N. Y.....		Qualified
University of Arkansas School of Medicine.....	Little Rock, Ark.....		No
University of Texas School of Medicine.....	Galveston, Texas.....		No
University of Pittsburg School of Medicine.....	Pittsburgh, Penn.....	Yes ( 1st yr. )	
University of North Dakota School of Medicine.....	Grand Forks, N. D.....	Yes	No
University of Missouri School of Medicine.....	Columbia, Mo.....		No
Temple School of Medicine.....	Philadelphia, Penn.....	Yes	
University of Virginia School of Medicine.....	Charoettesville, Va.....		Qualified
Stanford University School of Medicine.....	San Francisco, Calif.....		Qualified
George Washington School of Medicine.....	Washington, D. C.....		Qualified

(2) "While we have no formal course in our school in the art of medical practice, of necessity attention must be paid to this subject in all of our clinical departments."

(3) "Our curriculum committee has approved a course in Medical Economics. This was done last year. Our difficulty at the moment is to find a man, both competent and willing to present such a course. It is a very easy matter to set up some kind of a course saying we will devote so many hours to insurance, so many hours to collective agencies, and so many hours to the question of the ability of patients in various income levels to pay doctor's bills, but that is quite different from having a man to teach it so that the students will be interested and do some thinking on the question. Personally, I am very much in sympathy with a course in Medical Ethics and am still looking for a proper teacher."

One or two schools follow the practice of selecting proven men in practice out over the state, whose ability and integrity is unquestioned to come to the school at various times during the year and present various problems bearing on the Art of Medical Practice and Medical Economics such as:

- Medical Licensure
- Consultation Practice
- Art of Medicine
- Opening an Office in a Large City
- Advantages of Rural Practice
- Public Health Service as an Opportunity for Young Men
- Sex Hygiene
- Contract Practice
- Malpractice in Treatment of Fractures
- Indigent Sick
- Value of Membership in County Medical Societies
- Postgraduate Instruction for Medical Practitioner
- Economic Aspects of Medical Practice
- Economic Considerations For the Young Practitioner in Small Towns
- Some of the Problems that the Young Physician Encounters, etc.

From reading and rereading the letters sent in answer to the questionnaire, it is apparent to this committee that a need is felt by the heads of the medical schools interviewed for some course to be offered to medical students along the line of Medical Economics and/or the Art of Medical Practice, and that such a course, or instructions about the subject is being presented in some manner in most of the schools interviewed.—Dr. J. A. Blount, Larned.

---

## TUBERCULOSIS CONTROL

---

### DOUGLAS COUNTY PLAN

Douglas County calls attention to the fact that its interest in tuberculosis dates back many years among the local medical profession. In 1908 several laymen and several physicians attended a meeting in the state house for the purpose of doing something about the White Plague. In 1909 the late Dr. S. C. Emley took out a tuberculosis car and ten years later one of the public health nurses from this county, Miss Mary Haight, took out another car for a renewal and mop up campaign.

Soon after the end of the World War, the Kansas Tuberculosis and Health Association with the aid of the local chapter and some cooperation by the medical profession founded a monthly diagnostic clinic for tuberculosis and it has been kept running to date. It has been appreciated and well patronized by the public and the profession.

Occasionally through the years there has been a more or less general movement for some form of skin testing, especially among the young. In 1907 the twenty-eight members of the sophomore class of the medical school took the Calmette eye test and three reactors were found, one of whom went on to a demonstrable tuberculosis. He attributed his final rehabilitation to the early start this test gave him. Moro ointment was largely used by the local profession for many years but during the Lawrence meeting of The Kansas Medical Society in 1933, a visiting specialist made such an enthusiastically convincing demonstration of the intradermal test that it has been mainly in vogue ever since. In the spring of 1937 a representative of the Kansas State Board of Health gave this test to several hundred school children and many of the reactors were followed up in x-ray and other examinations. Further and fuller studies in this field are in preparation.

During the years some frictions and misunderstandings developed. In the fall of 1937, these became acute enough to require attention. A meeting of four interested groups, the Tuberculosis and Health Association, the county medical society, the Kansas State Board of Health and the Lawrence Board of Health, was held and the following general plan was agreed upon:

(1) A monthly (ten per year) Tuberculosis Clinic is being held.

(2) It is called a diagnostic clinic to conform to the regulations of the Tuberculosis and Health Association.



(3) The incidental advice to patients, families, and physicians relative to management or treatment is considered as only incidental and in nowise as insubordinate or offensive to anyone.

(4) It is sponsored by the Tuberculosis and Health Association.

(5) It is open and free to the public and to the medical profession.

(6) There is a committee whose chairman was appointed by the mayor from the Health Committee of the City Government, and whose other two members were named respectively by the local Tuberculosis and Health Association and the Douglas County Medical Society, whose duty it is to provide, develop, and keep up to date working rules for these clinics.

(7) The clinic is advertised and financed in its incidentals and for its clinician up to \$25.00 per clinic by the Tuberculosis and Health Association. It is supported, patronized and promoted by all of us, and is financed to the extent of \$15.00 per monthly clinic by the Lawrence Rotary Club.

(8) It is expected that the state board will conduct a tuberculosis skin test clinic with x-ray follow-up which will be open to all but especially pushed as for the school children of the city and county and be followed thoroughly in a search for sources and contacts.

(9) Dr. C. F. Taylor is the consultant clinician for the clinic.

(10) The clinic is held in the hospital where x-ray facilities are available at regular rates to pay patients and at partial rates paid for by the Red Cross or by the Tuberculosis and Health Association for the indigent and semi-indigent patients.

(11) Routine laboratory work is cared for through the Norton Sanitorium or through the laboratory of Kansas University.

(12) All patients are referred to their respective physicians and the clinical findings of the consultant are mailed to the physicians with his recommendations.

#### DURATION OF LIFE OF TUBERCULOSIS PATIENTS

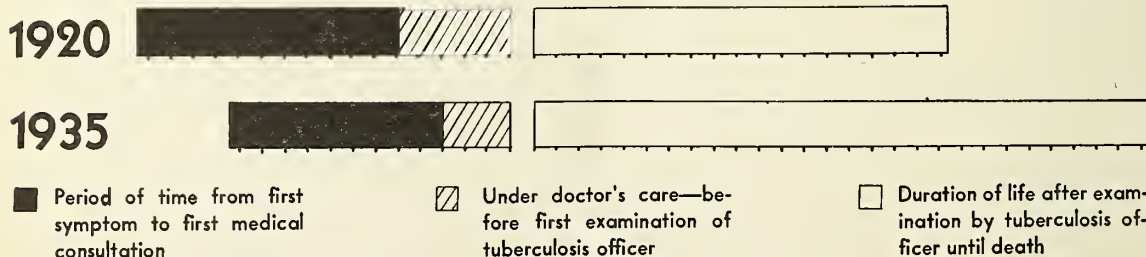
For many years efforts have been made in Lancashire (England) to educate the public to seek medical advice as soon as certain symptoms of tuberculosis manifest themselves. In an attempt to assess the value of such education the author, who is the Tuberculosis Officer of Lancashire, has measured the period of illness before the patient was examined for the first time by the tuberculosis officer and the duration of his life after that time. The period of illness before the tuberculosis officer's examination was sub-divided to show (a) how long the patient waited before consulting his medical attendant and (b) how long he remained under his care before being referred to the tuberculosis officer. Such measurements were made for two selected years, 1920 and 1935 and compared. More than 200 consecutive cases were included in each year's study.

The investigation was made only of patients who had died of tuberculosis, which limited the inquiry to the more advanced cases. To put the question of diagnosis beyond doubt, only cases with tubercle bacilli in the sputum were included. These restrictions naturally excluded the more hopeful types of cases. The conclusions reached were that:

1. The duration of illness, from the appearance of the first symptom to consultation with the tuberculosis officer, averaged 16.7 months for the 1920 group and 12.5 months for the 1935 group.

2. This reduction of 4.2 months' delay was due to (a) earlier consultation with the family doctor and (b) more prompt reference of the patient to the tuberculosis officer.

#### DELAY SHORTENS LIFE



Each interval represents one month

3. The 1935 group lived on an average of 9.1 months longer than the 1920 group after the initial examination by the tuberculosis officer.

4. The longer duration of life may be due to (a) examination of the patient in an earlier stage, (b) better living conditions, (c) improved methods of treatment. It is not possible, however, to assess the value of modern methods of treatment as the investigation deals only with patients who died, taking no account of patients who are still under supervision or who have recovered.

5. Efforts to encourage patients to seek treatment earlier has met with some success. The average delay was reduced by some twenty-five per cent.

*Average Duration of Illness of Positive Sputum Patients, G. Lissant Cox, M.A., M.D. Cantab., The Medical Officer, April 16, 1938.*

## THE SALINE COUNTY PLAN

The Saline County Medical Society has a special Tuberculosis Committee which has its own meetings as well as joint meetings with a committee from the Saline County Tuberculosis Association. The general feeling of the Saline County Medical Society is that there is a strong lay interest in tuberculosis and that it is desirable for the medical society to furnish leadership to whatever tuberculosis work is done in the county.

Some of the work being done under this arrangement is as follows:

1. Tuberculosis clinics have been conducted by a rotating selection from members of the Saline County Medical Society.

2. There has been some compensation paid to the member holding the clinic.

3. The Saline County Tuberculosis Association has furnished some financial assistance in the tuberculosis work.

4. The tentative plan suggested by the medical society committee at present is as follows:

(a) Tuberculin testing of certain classes of school children.

(b) Chest x-ray of all possible reactors paid for at a nominal charge by the Saline Tuberculosis Association.

Some of the advantages advanced for this plan are as follows:

1. The leadership in this work in Saline County remains with the Saline County Medical Society in cooperation with the Saline County Tuberculosis Association.

2. The medical society realizes the lay interest in tuberculosis and is attempting to give

leadership to that interest.

3. The consultant in charge of the clinic has been chosen in rotation from among its own members.

---

## NEWS NOTES

---

### OSTEOPATHY

Attorneys for B. L. Gleason, osteopath of Larned, filed the following motion for re-hearing in the case of State vs. Gleason on June 30:

In the presentation of this petition for a rehearing the defendant respectfully requests the court to reconsider its findings and determination of certain of the questions of law which were propounded, which were decided adversely to the contentions of the defendant.

We submit as a fundamental proposition, that the court arrived at erroneous conclusions because it violated a rule of statutory construction in holding that the phrase "shall not administer drugs or medicine of any kind nor perform operations in surgery" as contained in the laws of 1901, Chapt. 254, Sec. 6 was an inaccurately used expression and should have been omitted from the statute. Certainly the term "drugs and medicine" was understood by the legislature and not inaccurately used.

We submit that the court was led into this error by erroneously assuming that "the science or system of osteopathy generally speaking, strongly opposed the use of drugs as remedial agencies in treating the sick, afflicted or injured and osteopathic schools and colleges of good repute contain no course for the study of materia medica; hence there was no real occasion to prohibit osteopaths from using drugs since they made no claim or pretense of doing so nor did they study to qualify themselves for such use."

If the court chose to disregard the dropping of the phrase above quoted from the 1913 law, it should have recognized its statement "if there is any substantial controversy on this point (What was taught in osteopathic colleges in 1913) the controversy is one of fact rather than one of law," rather than to have assumed as the court did on page 12 of the opinion that "what was taught in them (osteopathic colleges) in 1913 was a matter of common knowledge" and then assume that materia medica was not taught in osteopathic colleges in 1913.

We submit that the evidence on this question will demonstrate that materia medica was taught in osteopathic colleges in 1913 and was recognized as a proper method of treatment by osteopaths in certain cases and as an aid in manipulative healing.

We therefore make the unusual request that the court either grant this rehearing so that the facts may be presented and the court's erroneous presumption of fact be corrected, or that this application for rehearing be held in abeyance by the court until the evidence is taken by the commissioner and the court informed as to what was taught in osteopathic schools in 1913, and the use which osteopathic physicians made of drugs in 1913, which will demonstrate to the court the real reason why the phrase "shall not administer drugs or medicine of any kind or perform operations in surgery" was dropped from the 1913 law.

With this brief discussion of the fundamental propo-



sition, we will proceed with the discussion of the detailed questions.

As defendant construed the opinion, this court has interpreted and construed Questions Nos. 4, 5, 6 and 7 in conformity with the contentions of the defendant.

With the decision of the court on questions Nos. 10 and 11 the defendant will present no argument further than what was contained in his briefs.

To the defendant it would appear that the court has answered question No. 1 both affirmatively and negatively. The Court recognizes that the osteopathic statute is prospective in operation and that it was designed to operate in the future. The Court recognizes the fact that the science is progressive, as is all science. The Court then indulges in the negative finding, that the osteopathic physician and surgeon is limited in the scope of his practice. The Court apparently bases this limitation upon what the Court believed, in the absence of all proof, was generally known and understood as being taught in the accredited colleges of osteopathy in 1901 and 1913.

In this connection, we desire to again call the attention of the Court to Article V of the Articles of Reincorporation of the American School of Osteopathy of Kirksville, Missouri, which were adopted in 1894 and which provide:

"That the said Board of Trustees and their successors for a period of 50 years shall have full power to appoint a faculty to teach such sciences and arts as are usually taught in medical colleges; and in addition thereto, the science of osteopathy."

This article certainly clearly indicates that the course of study in that college included all the sciences and arts taught in medical colleges.

And again on September 3, 1909, the same institution upon its reincorporation adopted in its articles of incorporation, the following:

"The corporation is formed for the purpose of conducting osteopathic schools and affirmaries, and to improve our present system of surgery, obstetrics and treatment of disease generally, and to place the same on a more rational and scientific basis."

The above provisions from the fundamental articles of the parent college should indicate to the Court that the science of Osteopathy was never intended to exclude any of the teachings of the regular school of medicine, but was intended to be an improvement on the system that had therefore been taught in reputable medical colleges. Osteopathy was never intended to be a substitute, but a betterment of, or an improvement upon the practice of the healing art.

In order to further convince this Court that the science of osteopathy is prospective in operation, we again call the Court's attention to Article III of the Articles of Incorporation, adopted by that school on July 2, 1936, wherein it was said:

"Conducting an Osteopathic college wherein students are to be taught the science of osteopathy, Medicine, surgery, and all other subjects pertaining thereto . . ."

In this connection we desire to call the Court's attention to a cardinal rule of statutory conclusions:

"It is a rule of statutory construction . . . that legislative enactments in general and comprehensive terms, prospective in operation, apply alike to persons, subjects, and business within their general purview and scope, existent at the time of the enactments, and to those coming into existence subsequent to their passage." (Haselton v. Inter-State Stage Lines, 133 Atl. 451, 47 A. L. R. 223.)

In the case of *State v. Trust Company*, 99 Kan. 841, our Supreme Court said in construing a statute:

"It seems clear that the legislature intended that this statute was to operate prospectively. That would ordinarily follow, not because a retroactive effect could not be given, but that such construction is never given unless the legislative intent to do so is clear and unequivocal."

And quoting from the case of *Bailey v. Baldwin City*, 119 Kan. 605, at page 608, we find the rule as stated by the Supreme Court of the United States to be:

"All statutes shall be considered prospective, unless the language expressly or by necessary implication required other construction." (*Fullerton-Krueger Lumber Company v. Northern Pacific Ry. Co.*, 45 Sup. Ct. 143.)

Defendant respectfully contends that the finding of the Court that the prospective operation of this statute is confined to what the osteopathic profession was taught from 1901 to 1913 would absolutely abolish the relation which now exists between a physician and surgeon and his patient. No osteopathic physician and surgeon could keep pace with the progress made in his science and be restricted to what was taught in his college in 1913. Neither could he render that degree of skill which the law requires him to possess and be limited to what he was taught in a college of osteopathy some twenty-five years ago. We respectfully urge that the Court erred in so qualifying the prospective operation of the statute.

The Court finds that the osteopathic physician and surgeon was limited to his practice of osteopathy to that state of the science which was known and understood when our statutes were enacted. The Court says that they are not authorized to practice optometry or any of the other professions which require a specific certificate of authority. The defendant respectfully contends that he is not attempting to practice any science other than the science of osteopathy. Defendant contends that he is practicing the science or system of osteopathic medicine as taught and practiced in the legally incorporated colleges of good repute. We again call the Court's attention to a provision in the charter of the year 1894 of the American School of Osteopathy which provides:

"To teach such sciences and arts as are usually taught in medical colleges; and in addition thereto, the science of osteopathy."

The course of study in the accredited schools in both the years 1901 and 1913 called for the teaching of surgery in all of its forms and the use of drugs. Surgery was taught under the heading of surgery and drugs were taught under the heading of comparative therapeutics, and the same text books were used in presenting these courses in the school as were usually used in medical colleges. This Court calls attention to the fact that a certificate to practice osteopathy never has been recognized by our statutes or by our courts as authorizing its holder to engage in the practice of "medicine and surgery" in this state. In this connection, we desire to call the Court's attention to the following cases, as a few among a perfect multitude of decisions, holding that the practice of osteopathy is the practice of medicine:

These cases all hold that one is practicing medicine who is practicing the "healing art"; that is, one is practicing medicine who holds himself out as competent to diagnose and cure disease.

We still insist that there is no magic in the word "surgery" and that an osteopathic physician and surgeon has always pursued the same course of study and studied

AUGUST, 1938

# His First Solid Food

## PABLUM

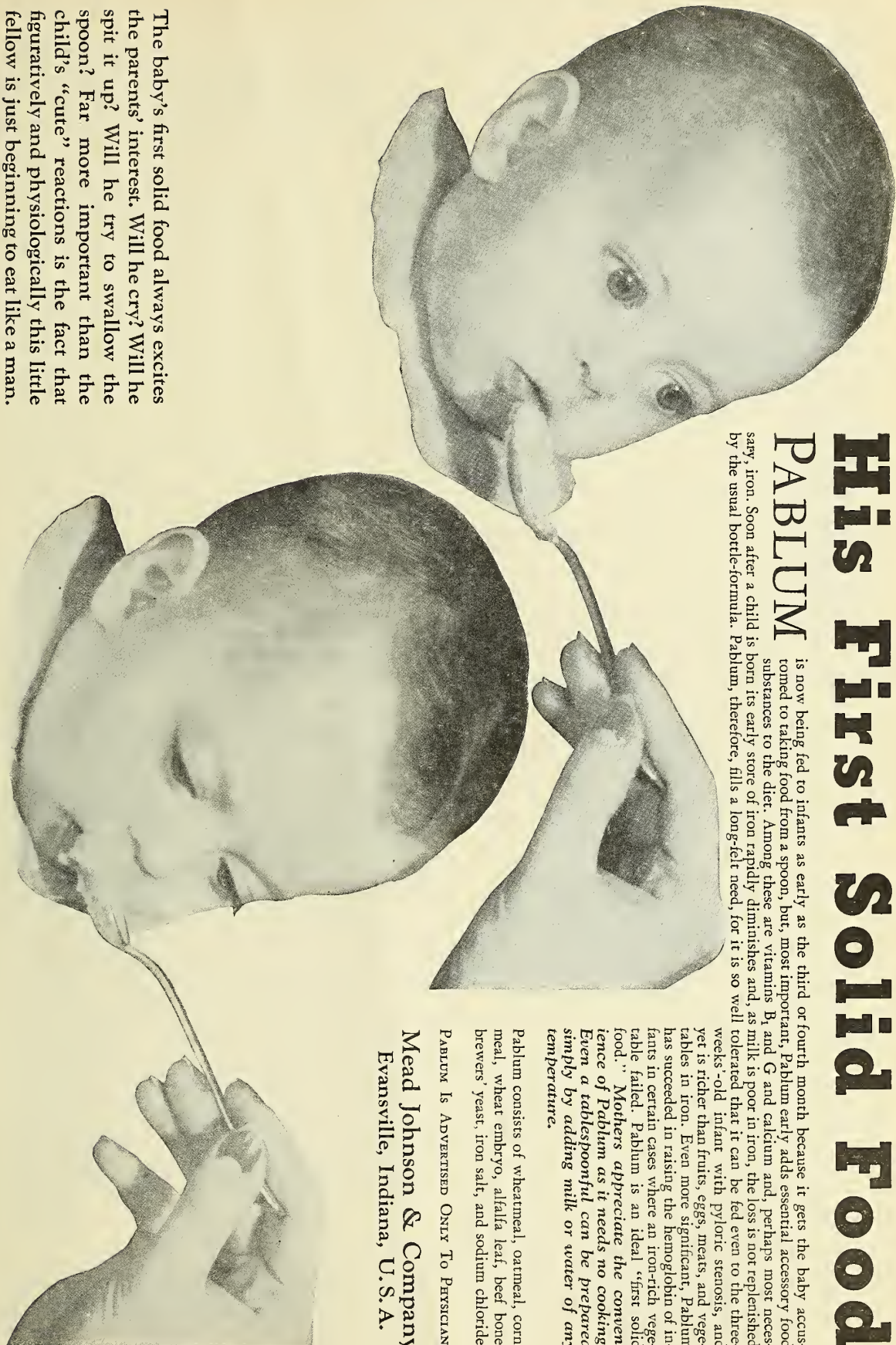
is now being fed to infants as early as the third or fourth month because it gets the baby accustomed to taking food from a spoon, but, most important, Pabulum early adds essential accessory food substances to the diet. Among these are vitamins B<sub>1</sub> and G and calcium and, perhaps most necessary, iron. Soon after a child is born its early store of iron rapidly diminishes and, as milk is not replenished by the usual bottle-formula. Pabulum, therefore, fills a long-felt need, for it is so well tolerated that it can be fed even to the three-

weeks-old infant with pyloric stenosis, and yet is richer than fruits, eggs, meats, and vegetables in iron. Even more significant, Pabulum has succeeded in raising the hemoglobin of infants in certain cases where an iron-rich vegetable failed. Pabulum is an ideal "first solid food." *Mothers appreciate the convenience of Pabulum as it needs no cooking. Even a tablespoonful can be prepared simply by adding milk or water of any temperature.*

Pabulum consists of wheatmeal, oatmeal, cornmeal, wheat embryo, alfalfa leaf, beef bone, brewers' yeast, iron salt, and sodium chloride.

PABLUM IS ADVERTISED ONLY TO PHYSICIANS

**Mead Johnson & Company**  
Evansville, Indiana, U.S.A.



The baby's first solid food always excites the parents' interest. Will he cry? Will he spit it up? Will he try to swallow the spoon? Far more important than the child's "cute" reactions is the fact that figuratively and physiologically this little fellow is just beginning to eat like a man.



the same texts in surgery and has been taught to perform surgical operations in the same manner as any other surgeon engaged in general practice. In this connection we desire to call the attention of the Court to the peculiar wording of our medical practice act. It provides:

"Any person shall be regarded as practicing medicine and surgery within the meaning of this act who shall . . . perform any surgical operation of whatsoever nature for the cure or relief of any wounds, fractures or bodily injury, infirmity or disease of another person . . ."

Defendant is not going to assume that any of the language of this statute is meaningless, surplusage or an inaccurately used expression. We insist that the medical practice act in defining surgery, included a definition of all kinds of surgery because it speaks of surgical operations of whatsoever nature and certainly no effort is made in that statute to confine surgery to what is known as operative surgery.

In connection with this feature of the case, the defendant hopes to be able to demonstrate by conclusive proof upon the trial upon the facts that the course of study in accredited schools of osteopathy in the year 1901 and in the year 1913, included both the teaching of the use of drugs and surgery in all of its forms, but nevertheless we insist that the Court has too narrowly circumscribed the progressive nature and character of this science by limiting the osteopathic physician and surgeon in his practice to what was taught and practiced in his schools during the period between those years.

The defendant still insists in connection with the opinion of the Court upon this second conclusion of law propounded to the effect that the curriculum or course of study laid down in the statute was simply a list of vision-wideners and knowledge-fillers and not anything that he would be entitled to use in his practice, is a very narrow and strained construction indeed. We feel constrained again to call attention to the expression of the Supreme Court of Minnesota in the case of *Stoike v. Weseman*, 167 Minn. 266, 209 N. W. 993, where that Court said in connection which it placed upon a similar question:

"Manifestly there would be little or no reason for the statutory requirement that an applicant for a license to practice osteopathy should have had a course of instruction in obstetrics and should pass a satisfactory examination in that subject if he was not permitted to attend women in childbirth by virtue of his license as an osteopathic physician. If the legislature had intended to prohibit him from practicing obstetrics, it is fair to assume that it would have said so in plain language just as it did when it provided that a license issued under the Act of 1903 should not authorize the holder to prescribe drugs for internal use or perform major surgical operations."

The Court is of the opinion that the contention of the defendant with regard to his rights to practice surgery is altogether too broad and the Court, neatly digressing for the moment, says that surgery was originally part of the profession of barbers. The plaintiff takes us a few steps further back into the realm of antiquity and advises us, in its brief, that the ancient Greeks had a name for it and that they called it *Kheriourgos*, which implied work with the hands, that is manipulation, and that in ancient Thessaly they practiced surgery in that manner. If the plaintiff is correct, then Dr. Still may have been in error when he announced that he had given something new to the world. If the origin of surgery can be laid at the feet of barbers, then we have a somewhat different picture. Certainly the barber was, in a measure at least, engaged in the practice

of surgery. He was what is known as a blood-letter, and we assume that he was an operative surgeon and did not remove blood with his hands alone. But whether the surgeon practices at the present time after the fashion of the ancient Greek or the more modern barber, he must fall within the category of performing "any surgical operation of whatsoever nature," as defined in our medical practice act. If this be not true, we feel compelled to say that the legislature was wasting some more valuable time filling up a statute with useless and meaningless words.

The Court says, under this heading, that our legislature recognizes that there is a broad field for the use of that system of the healing art known as osteopathy. And then the Court apparently limits the practice of the profession of osteopathy to what it was privileged to know about the art of healing in 1915. It is true that the Court, in fixing the limitations speaks of surgery in the main, and we assume that the Court is not referring to such operative surgery as the osteopathic physician and surgeon is required to perform as an incident to his manipulative procedures.

In connection with its interpretation of this question of law, the Court is of the opinion that the prohibitory provisions of the 1901 act were unnecessarily inserted in the act and as the Court says were "an inaccurately used expression" and that the legislature should have omitted them. The Court for that reason is of the opinion that their omission from the 1913 Act is likewise meaningless. The Court says that there was no occasion to prohibit osteopathic physicians and surgeons from using drugs because they did not make any claims or pretense of doing so and that the same thing was true about operative surgery. We believe the Court, in arriving at its conclusions, has lost sight of a matter which was certainly as much a matter of common knowledge as what was taught and practiced in osteopathic colleges of good repute at that time, and that is the fact that in 1901 a relentless warfare was being waged against the osteopathic physicians by the older branch of the healing art. The Court might well assume that the legislature deliberately and intentionally prohibited osteopathic physicians and surgeons from prescribing drugs and practicing surgery because of that situation. Defendant has no doubt that that is the true situation and he is amply fortified in his belief by what occurred in the legislature of 1913. In determining legislative intent, the Court is entitled to look to the actual proceedings of the legislature as disclosed by its records.

In 59 C. J. 1021, we find the following:

"Reports and explanatory statements of legislative committees in charge of a bill, while not binding on the courts in interpreting statutes, may be resorted to as indicative of the intent of the legislature in a case where the meaning of the statute is obscure, or for the purpose of ascertaining the necessity for the enactment, the situation under earlier laws, and the proposed remedy of the new law, . . ."

The above quotation quite neatly covers the present situation as the proceedings of the Kansas State Senate will disclose. On March 12, 1913, the osteopathic act of 1913 was being considered in the Senate, apparently on third reading subject to amendment and debate. Senator Huffman, who incidentally was one of the leading physicians of Kansas of the old school, moved an amendment to section 10, line 25, after the word *Kansas*, by the insertion of the following:

"But they shall not administer drugs or medicine of any kind, or perform operations in surgery."

The record shows that the motion was lost. This action of the Senate will be found in the Senate Journal of 1913

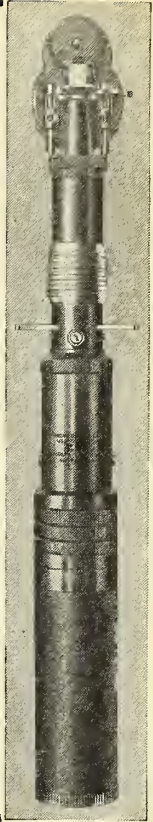
# FRIEDENWALD

*The greatest contribution  
to ophthalmoscopic design  
in the Twentieth Century*

Originally designed in 1926 by Jonas S. Friedenwald, noted Johns Hopkins ophthalmologist, this instrument has ever since been the last word in ophthalmoscopes. It provides: **Magnification up to 45 diameters instead of the usual 15 . . . Slit lamp microscopy of the retina without use of a contact glass . . . reflexless direct ophthalmoscopy . . . special correcting lenses to neutralize chromatic and spherical aberration of the patient's eye.**

Write for your copy of "Friedenwald Ophthalmoscope" supplied upon request. It explains many outstanding features of this fine instrument. Your American Optical Representative will gladly demonstrate this instrument.

**AMERICAN OPTICAL COMPANY**



## Grandview Sanitarium

KANSAS CITY, KANSAS, (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of super accommodations for the care of:

NERVOUS DISEASES  
MILD PSYCHOSES  
THE DRUG HABIT  
AND INEBRIETY.

Situated on a 20-acre tract adjoining City Park of 100 acres. Room with private bath can be provided.

The City Park line of the Metropolitan Railway passes within one block of the Sanitarium. Management strictly ethical.

Telephone: Drexel 0019

SEND FOR BOOKLET

**E. F. DeVILBISS, M.D., SUPT.**

OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.



at page 825. Here was an attempt on the part of a senator to have incorporated into the osteopathic act the same prohibition that the act of 1901 carried and the record of the senate is a positive declaration of legislative intent and purpose to have the prohibition against the use of drugs and surgery eliminated. In connection with the above situation from *Corpus Juris*, we call the attention of the Court to 25 R. C. L. at page 1039. It is there said that the "courts may avail themselves of such light as the history of the steps taken in the enactment of the law as disclosed by the legislative record may afford." Certainly even if the language appearing in the 1901 act could be held to be merely a waste of words and a meaningless thing, the Court cannot destroy the intent indicated by this effort to incorporate the same prohibition in the 1913 enactment. There was nothing meaningless about the effort of the Doctor Senator to restrict the osteopathic physicians and surgeons in their practice, and there is certainly nothing meaningless in the rejection of his motion by the Senate. In view of the record of the proceedings in the State Senate in the year 1913, we respectfully urge that the Court again review its conclusion as to the proper interpretation to be placed upon the second conclusion of law.

In its interpretation of the third question of law propounded the Court recognizes the efficacy of the "as taught and practiced" provision of the statute and in this connection, defendant respectfully suggests that a very substantial controversy exists as to what was taught and practiced in legally incorporated colleges of osteopathy of good repute in the years 1901 and 1913 and the defendant will seek to demonstrate what the course of study was in those colleges by competent and convincing testimony.

The Act of 1901 contained this limitation upon the practice rights of osteopathic physicians "but that it not administer drugs or medicines of any kind or perform operations in surgery." The Court, in its opinion, finds that this prohibition "was, at its best, an inaccurately used expression" and should have been omitted for that reason alone. We assume that the Court had in mind in this connection what the Court stated under the third subdivision of its opinion, that what was taught in the colleges of osteopathy was a matter of common knowledge. We entirely from the field of the law and entered into the belief that the Court in making this finding has departed entirely from the field of law and entered into the realm of fact. It would appear that the Court is taking what might be called judicial notice of what was taught in these colleges in 1901 and 1913. The language of this 1901 statute is plain and unambiguous and the meaning of the legislature is too clear and unequivocal to call for judicial construction. Where that is the situation it is certainly the duty of a Court to find the legislative intent from the language of the statute and to give it meaning. To hold this prohibitory provision meaningless is in effect to legislate. How could this Court, at this time, know what the legislative intent was in 1901, other than as indicated by the act of the legislature itself and the published record of its proceedings? A question of fact has been raised by the pleadings in this case as to what was taught and practiced in the accredited colleges of osteopathy in 1901 and 1913. We call the attention of the Court to the first paragraph of the syllabus in the case of *Alter v. Johnson*, 127 Kan. 443, which reads as follows:

"A primary rule for the construction of a statute is to find the legislative intent from its language, and where the language used is plain and unambiguous and also appropriate to the obvious purpose the court should follow the intent as expressed by the words

used and is not warranted in looking beyond them in search of some other legislative purpose or of extending the meaning beyond the plain terms of the act."

We have searched both text and adjudicated case for precedent to sustain a rule of statutory construction holding that plain and unambiguous language can ever be held to be the use of an "inaccurate expression." No Court should ever indulge in a privilege to legislate.

The Court, having found that this prohibition in the statute of 1901 was meaningless and served no purpose and that it should not have been placed in the statute by the legislature, then proceeds to say that its omission from the 1913 statute did not indicate an intention on the part of the legislature to lift a man on administering drugs or performing operative surgery. Under the heading of statutory construction it is said in 59 C. J. at page 993:

"In constructing a statute, the legislative intention is to be determined from a general consideration of the whole act with reference to the subject matter to which it applies and the particular topic under which the language in question is found, and the intent as deduced from the whole will prevail over that of a particular part considered separately."

We respectfully submit that the Court should have given consideration and meaning to the plain letter of the 1901 prohibition and that if it had done so, the Court would no doubt have followed its finding in the case of *Motor Equipment Company v. Winters*, 146 Kan. 127, at page 132, where the Court said, "In determining legislative intent it is essential that we consider statutes in existence when the statutes involved were enacted."

The statute of 1901, with its plain, unequivocal, and unambiguous prohibitory provision, was in full force and effect, when the statute of 1913 was enacted with its prohibitory provisions eliminated.

Respectfully submitted,  
W. H. Vernon  
James E. Smith  
Frank H. McFarland  
Vincent C. Fleming  
E. H. Hatcher

Another motion requesting the appointment of a special commissioner is also pending in the case.

It is probable that the state of Kansas and the Society will file replies to both the motions and that arguments thereon will be held before the Supreme Court in its September term.

## CANDIDATES

The following members were candidates for state offices in the recent primary election:

Dr. J. B. Carter, Wilson, Republican, for lieutenant-governor.

Dr. F. S. Hawes, Russell, Democrat, for Representative.

Dr. G. A. Leslie, McDonald, Republican, for Representative.

Dr. T. C. Kimble, Miltonvale, Democrat for Representative.

Dr. R. L. Von Trebra, Chetopa, Republican, for Representative.

Dr. Hawes, Dr. Leslie, and Dr. Kimble all ran unopposed and therefore were successful in their candidacies.

Two osteopaths, K. A. Bush of Harper and D. B. Fordyce of Oswego, and three chiropractors, C. B. Pettit of Lyons, H. O. Blanchat of Wellington, and J. Romary, Burlington, were nominated as candidates for Repre-



*Paid  
in full*

**A S**

**U S U A L**

Regardless of the state of collections in general, there is one group of pages in your Ledger that is free from overdue payments—the pages that contain the names of your patients that are covered by EMPLOYERS MUTUAL Insurance. For EMPLOYERS MUTUAL is justly proud of its record of claim-payments—invariably the promptest of any insurance company. This is your most direct proof of the efficiency of EMPLOYERS MUTUAL, although you must have noticed others such as the unequalled Safety Engineering Service that reduces the frequency and severity of accidents in hundreds and thous-

ands of industrial organizations, the rapidity with which service is rendered when needed, and the substantial savings that EMPLOYERS MUTUAL dividends give to policyholders. All of these benefits can come to you as readily as to the largest organization, in the forms of Automobile, Public Liability, Workmen's Compensation, and Fire Insurance that you must carry for complete protection. May we send a representative to discuss your insurance problems with you, and make unbiased recommendations as to protection and policies?

**EMPLOYERS MUTUAL  
LIABILITY INSURANCE CO.**

*Employers  
Mutuals*

**EMPLOYERS MUTUAL  
FIRE INSURANCE CO.**

*Automobile, Public Liability, Workmen's Compensation  
Plate Glass, Burglary, Fire and Tornado Insurance*

**HOME OFFICE: WAUSAU, WISCONSIN**

**WICHITA: 914 UNION NATIONAL BLDG.**

*Branch Offices and Resident Representatives throughout the Middle West  
Consult Your Local Telephone Directory*



sentative. All but D. B. Fordyce were unopposed. I. E. Nickell, osteopath, Smith Center, was defeated as a candidate for Representative.

### COUNCIL MEETING

A joint meeting of the Council and the Committee on Public Policy was held at Wichita on July 10. Members present were: Dr. N. E. Melencamp, President; Dr. J. L. Lattimore; Dr. F. L. Loveland; Dr. Marion Trueheart; Dr. Robert Sohlberg; Dr. Geo. O. Speirs; Dr. Walter Stephenson; Dr. J. F. Gsell; Dr. R. T. Nichols; Dr. L. S. Nelson; Dr. R. W. VanDeventer; Dr. G. B. Morrison; Dr. Warren Bernstorff; Dr. F. R. Croson; Dr. L. F. Barney; Dr. Geo. M. Gray; Dr. H. L. Chambers; Dr. C. C. Nesselrode; Dr. H. L. Snyder; Dr. E. M. Ireland; Dr. R. W. Urie; Dr. E. C. Duncan; Dr. A. C. Armitage; Dr. C. D. Blake; Dr. Lloyd Reynolds; Dr. L. M. Schrader. Mr. Kirke Dale, Mr. Harry Fisher, and Mr. Hal Harlan, attorneys for the Society, Mr. John F. Austin, Executive Secretary of the Sedgwick County Medical Society and Clarence G. Munns, Executive Secretary were also present.

Several matters of importance were discussed and each Councilor was requested to report the recommendations made thereon to all members in his district.

Other items of business were approval of the appointment of a Committee on Automobile Accidents, and approval of the movie "Birth of a Baby" produced by Mead Johnson & Company and the American Society on Maternal Welfare.

Mr. Theo. F. Varner, assistant attorney general, attended the latter part of the meeting at the request of the Board of Medical Registration and Examination to discuss enforcement of Kansas healing laws.

### NEW LICENSEES

The following physicians were licensed to practice medicine and surgery in Kansas following the examination on July 1 in Kansas City, given by the Kansas State Board of Medical Registration and Examination:

Aldrich, Albert Turner	Miles, Paul Wendell
Beal, Raymond J.	Miller, Doris Leonard
Barry, William B.	Mills, Fred Edward
Blank, John N.	Mitchell, John C.
Block, Mary Jeffries	Morgan, David Basil
Bosse, Milton D.	Morley, Louise A.
Bowser, John F.	Moneses, Wayne E.
Brady, Charles S.	Montzingo, Helen Jane
Brown, Harwin J.	Morrison, Ira Robert
Clover, Phoebe	Newman, Cloyce A.
Coffelt, Ralph Wendell	Newman, Robert Lewis
Cohn, Allan A.	Ortman, Gareth S.
Coughlin, Samuel T.	Parker, Robert H.
Davis, Earl Scott	Passman, Harold
Deeths, Harry	Pearson, Paul E.
Dlabal, Luke Jacob	Patterson, Harold L.
Douglas, Harry Leo	Plagens, George Max
Dunscombe, Colby W.	Poindexter, Marlin H., Jr.
Eck, Daniel Burrow	Primakow, Max J.
Epp, Frederic O.	Prochazka, Otto Frank
Evans, Arthur Wilbur	Reid, Prentiss Edgar
Farney, Jacob Pfister	Reitz, Harvey Edward
Ferguson, James T., Jr.	Reynolds, Lloyd W.
Frangel, Sol I.	Rising, Jesse David
Franklin, Glenn C.	Rhoades, Gordon H.
Goldblatt, Bernard	Rook, Lee Emerson

Guernsey, Gretchen  
Harms, Albert C.  
Havley, Bernice  
Hardacre, Ruth Anna  
Harrington, Paul R.  
Hibbler, John A., Jr.  
Hill, Jack Harold  
Hill, James Noah  
Holcomb, Donald G.  
Howard, Donald Osgood  
Hurst, Thomas Charles  
Janzen, Arnold H.  
Kinsinger, Ralph R.  
Kirgis, Harold J.  
Klaumann, Benjamin F.  
Klinkenberg, Royle B.  
Koerber, Frederick L.  
Lalich, Joseph John  
Lies, Barthel N.  
Makart, Carl D.  
Mandeville, George  
Mayes, William Fred

Schmidt, John R.  
Sekavec, Gordon B.  
Sellards, Howard E.  
Sexton, Marshall C.  
Siever, James M.  
Simpson, James C.  
Stone, Frederick J. C.  
Smith, Orval L.  
Songer, Herbert Lee  
Stensaas, Carl O.  
Stone, William F.  
Tice, Raymond  
Tyler, Mary Whelan  
Ubelaker, Ernest J.  
Wallace, Alice Marie  
Wedin, Paul H.  
Williamson, Albert L.  
Wilson, Stewart McK.  
Williams, Ben C.  
Wood, Douglas Hodges  
Wulff, Edwin T.

### NEW COMMITTEE

Dr. N. E. Melencamp, President, recently appointed a Society Committee on Automobile Accidents. Membership of the committee will be Dr. A. K. Owen, Topeka, Chairman; Dr. J. L. Lattimore, Topeka; Dr. H. W. Powers, Topeka; and Dr. F. P. Helm, Topeka.

Origin of the committee was a suggestion from Mr. Gegroe A. Reed, Safety Engineer of the Kansas State Highway Commission that the Society could assist the commission in computing statistics on highway accidents; in establishing means for detecting drunken driving; in devising minimum health requirements for drivers licenses, etc. The committee will commence meetings with Mr. Reed within the near future.

### CANCER PROGRAM

The Committee on Control of Cancer has recently announced that the Kansas State Board of Health will cooperate with the committee in the presentation of a post-graduate course on cancer.

Plan of the course is that meetings will be held at six towns in various parts of the state during September, and that an additional series of meetings will be held in six other towns during March or April. The meeting places will be located so that each member may conveniently attend both the fall and spring lectures.

Speaker for the course will be Dr. Nathan A. Womack, Director of the Tumor Clinic, Barnes Hospital, St. Louis, Missouri.

Expenses of the course will be defrayed through funds available under the Social Security Act.

### COMMITTEE CONFERENCE

A conference of committee chairmen will be held during the latter part of August to discuss committee programs for the coming year.

Each committee will be assigned a list of projects for its consideration.

MEET YOUR FRIENDS  
At The  
**HOTEL KANSAN**  
TOPEKA, KANSAS

300 Rooms

Rates \$1.50 to \$3.00

All Fire Proof

Popular Priced Coffee Shop in Connection  
Also Main Dining Room and Private Dining Rooms  
Try Our Dinette for Light Lunches

**SURGICAL FITTINGS**

Graduate Fitters

Private Fitting Rooms

Your patients requiring SURGICAL SUPPORTS for Abdominal Ptosis conditions, Sacro-Iliac strains, Maternity, Post-Operative weakness, and different forms of Hernia, will be correctly fitted, when referred to

**A. M. Petro & Son**

Surgical Fitters and Pharmacists

839 N. KANSAS AVE., TOPEKA, KANSAS  
ELASTIC HOSIERY—TRUSSES—  
CURTIS PTOSIS SUPPORTS

**JOHNSON HOSPITAL**  
**CHANUTE, KANSAS**

Complete Clinical  
Laboratory  
Radium  
X-Ray

**REPRINT PRICE LIST**

Reprints from articles in the  
**KANSAS MEDICAL JOURNAL**

All Reprints are made the same size as  
Journal pages, 7 $\frac{3}{4}$  x 10 $\frac{1}{2}$  inches.  
Transportation charges on reprints are  
to be paid by the Author

No. Copies	Pages	Without Cover	With Cover
100.....	4	\$ 9.00	\$12.25
250.....	4	9.75	14.50
500.....	4	11.00	17.50
1000.....	4	18.00	26.00
No. Copies	Pages	Without Cover	With Cover
100.....	8	\$12.50	\$16.00
250.....	8	14.00	18.00
500.....	8	16.00	23.00
1000.....	8	21.00	32.00
No. Copies	Pages	Without Cover	With Cover
100.....	12	\$16.00	\$20.50
250.....	12	18.25	23.50
500.....	12	21.25	28.25
1000.....	12	28.00	39.00

**CAPPER PRINTING CO.**

Capper Building,  
TOPEKA, KANSAS

**PROFESSIONAL PROTECTION****A DOCTOR SAYS:**

"Relief from worry over possible financial loss and cost of legal procedure has been worth more to me than all the premiums that I have paid. I do not see how any man would attempt to practice without your insurance."

**THE****MEDICAL PROTECTIVE COMPANY**

OF FORT WAYNE, INDIANA

**WHEATON, ILLINOIS**



### K. C. CLINICAL CONFERENCE

The Committee on Arrangements of the Kansas City Annual Fall Clinical Conference has issued the following announcement of plans pertaining to its next meeting:

"The Kansas City Annual Fall Clinical Conference will be held in Kansas City, Missouri, at the Municipal Auditorium, October 3-6, inclusive. The meeting this year has been dedicated to the principle that the new things in medicine, both good and bad, need a careful, objective analysis and that this meeting is going to devote most of its time to such an analysis. There will be very little reviewed of proved, well known and well understood procedures and methods. The guest speakers and the local physicians have been selected for their ability to discuss subjects which the program committee feels will be of vital interest to every physician attending the conference.

Every doctor should mark his calendar now, and should plan to be in Kansas City October 3 for an intensive week of discussion and good times."

### SOCIAL SECURITY

The Society was advised, by the Collector of Internal Revenue on July 20, that it has been placed under the provisions of the Social Security Act and that it shall therefore pay old age and unemployment assessments thereunder for its employees.

An application for exemptions under the Federal Income Tax Law was approved on the basis that the Society is a non-profit scientific organization.

### LOCATION

Information has been received that there is a good location for a physician available at Selden, Kansas.

Selden is a town of approximately 450, located in Sheridan County. There is at present no physician in the town.

### GOLF AND TRAP PRIZES

The following members were prize winners at the golf and trap tournaments held in connection with the Wichita meeting:

Dr. W. F. Bernstorff—77—golf bag, A. S. Aloe; Quinton-Duffens Optical Company Championship trophy.

Dr. N. L. Rainey—79-12-67—electric clock, source unknown; Mead-Johnson handicap trophy. (1st low net).

Dr. E. S. Edgerton—78, No. 2 low gross, System of Surgery, Lea & Febiger.

Dr. C. H. Dixon—81-13-68, No. 2 low net; electric clock, C. B. Fleet Co.

Dr. A. L. Ashmore—99-30-69, No. 3 low net; electric razor, Petrolager Co.

Dr. P. B. Champlin—3-82, No. 3 low gross; fitted bag, Mennen Co.

Dr. W. K. Hobart—4-82, No. 4 low gross; fitted medicine case, Zemmer Co.

Dr. E. F. De Vilbiss—5-82, No. 5 low gross, fitted medicine case, Upjohn Co.

Dr. J. L. Lattimore—6-82, No. 6 low gross; 12 golf balls, M&R Dietetic Co.

Dr. E. M. Sutton—7-82, No. 7 low gross; 12 golf balls, Optical Service Company, Kansas City, Mo.

Dr. L. E. Knapp—100-30-70, No. 4 low net; insufflator, John Wyeth & Co.

Dr. F. E. Angle—88-18-70, No. 5 low net; ampoule case, Parke Davis Co.

Dr. F. J. McComb, 86-15-71, No. 6 low net.

Dr. W. D. Pitman—99-18-71, No. 7 low net; ampoule case, Burrough-Wellcome Company.

Dr. W. T. Elnen—92-21-71, No. 8 low net; surgical kit, Archer Prescription Company.

Dr. L. S. Roberts—95-24-71, No. 9 low net; sterilizer, Lederle Company.

Dr. G. G. Whitley—86-14-72, No. 10 low net; 12 golf balls, Dunlop Rubber Co.

Dr. J. V. VanCleve—87-15-72, No. 11 low net; hypo-syringe, Sharp & Dohme Co.

Dr. E. H. Cook—86-13-73, No. 12 low net; hypo-syringe, Sharp & Dohme Co.

Dr. R. P. Knight—84-11-73, No. 13 low net; \$3 meal ticket, Wolfe Cafe.

Dr. Geo. Gsell—88-15-73, No. 14 low net; \$3 meal ticket, Wolfe Cafe.

Dr. A. F. Rossitto—97-24-73, No. 15 low net; Hughes Practice of Medicine, P. Blakiston's Son & Co.

Dr. J. A. MacLaughlin—104-30-74, No. 16 low net; Book of Health, Squibbs.

Dr. O. W. Miner, high score 144; gland products, Lafayette Pharmacal Co.

Dr. H. A. West, 2 hole total of 22 strokes; framed picture, W. E. Isle Co.

Dr. F. L. Menehan, 17th low net; Pediatrics Book, Duke Univ. Press.

Dr. Floyd Dillenbeck, 12 bottles of Horlick's Malted Milk Tablets.

Dr. Ernest Decker, 12 bottles Horlick's Malted Milk tablets.

### TRAP PRIZES

High on 100 skeet—100 trap 12 pairs doubles.

Dr. L. A. Sutter-Victory Trophy by the Wichita Gun Club.

High on 100 skeet and 100 trap targets.

Dr. R. C. Cheney—One win on the Mead-Johnson trophy.

Dr. F. L. Loveland—Skeet shooters trophy by the Wichita Gun Club.

Dr. R. C. Cheney—Upjohn medicine bag.

Dr. T. S. Finney—Eagle trophy by the Wichita Gun Club.

Dr. H. L. Chambers—Polaroid Sun Glasses by the American Optical Co.

Dr. W. G. Gillett—Loving cup by the Wichita Gun Club.

Dr. G. B. Morrison—Loving cup by the Wichita Gun Club.

Dr. N. C. Nash—Loving cup by the Wichita Gun Club.

Dr. L. A. Sutter—Loving cup by the Wichita Gun Club.

Dr. N. C. Nash—Medal by the Wichita Gun Club.

Dr. L. A. Sutter—Medal by the Wichita Gun Club.

Dr. A. S. Anderson—Trapshooter trophy by the Wichita Gun Club.

Dr. L. A. Sutter—Mennen's Dressing Case.

Dr. A. L. Hilbig—Victory Statue by the Wichita Gun Club.

Dr. Chas. Rombold—Polaroid Sun Glasses by the American Optical Co.

# BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

## VI. COOLING THE TIN CONTAINER AFTER THERMAL PROCESSING

● On this page we have previously described certain basic operations in commercial canning procedures. These have included cleansing of the raw material; blanching; exhausting or pre-heating; sealing the tin container; and thermal processing of the sealed container. In this—the last of this series—we shall discuss the final basic operation, namely, the cooling of the sealed can immediately after the heat process.

One main reason for rapid and thorough cooling of the can contents—as soon as the objective of the heat treatment has been fulfilled—is more or less self-evident. Prompt cooling checks the action of the heat and thus prevents undue softening in texture or change in color of the food. Also important, particularly in the case of foods of an acid nature, is the prevention of excessive chemical action between the food and the metal container, which may occur if the contents of the can remain hot for an extended period of time. In modern practice, two types of cooling are commonly used, namely, air cooling and water cooling.

Air cooling, as the name implies, involves cooling of the tin container by facilitating radiation of its heat into the air. This type of cooling is adaptable to certain products in small cans. In other products, or in the case of larger cans, it is employed chiefly when the slower loss of heat, characteristic of this cooling method, is essential either for preservation of the food, or for the production of certain quality characteristics in the final product. Modern air cooling is accomplished in well ventilated, specially designed warehouses where the cans are piled in rows, allowing ample space between rows for efficient air circulation.

The several methods of water cooling and the technique by which they are carried out are detailed elsewhere (1). Briefly, water cooling may be effected in a variety of ways. The hot cans may be cooled by admitting water into the retort in which they were processed, or they may be cooled after removal from the retort by conveying the cans through tanks of cold, running water or through cold water showers. Large size, or irregularly shaped cans—processed under steam pressure—must be cooled in the closed retort at the end of the process to avoid undue strain on the containers. This is accomplished by “pressure cooling” in which pressure is maintained in the retort during the cooling of the cans, to counterbalance the pressure which develops during the process within the can itself. Commercially, cans are water-cooled to about 100°F. so that enough residual heat remains to dry the can exterior.

Present day canners are fully aware of the importance of cooling their products rapidly and completely as soon as the process is completed, in order to insure the production of canned foods with high quality characteristics. Consequently, in modern canneries the cooling operations are strictly supervised like the other basic operations in the commercial canning procedure. After inspection and labeling, the cooled cans are then ready to enter distribution channels for delivery to the consumer.

In this series of six discussions, we have attempted not only to describe the basic steps in commercial canning procedures, but also to explain their purposes. We trust this series may help bring a better understanding of this important method of food preservation.

## AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

(1) 1936. A Complete Course in Canning, 6th Ed. The Canning Trade, Baltimore.

*This is the thirty-ninth in a series of monthly articles, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research. We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



Dr. O. C. McCandless—Eagle trophy by the Wichita Gun Club.

Dr. L. A. Sutter—Lunch Box by Riley's Drug Store.

Dr. J. W. Cheney—Medal by Wichita Gun Club.

Dr. W. G. Gillett—Medal by Wichita Gun Club.

Dr. O. C. McCandless—Medal by Wichita Gun Club.

Dr. H. P. Jones—Medal by Wichita Gun Club.

Dr. A. S. Anderson—Medal by Wichita Gun Club.

Dr. H. L. Chambers—Bull dog ash tray by Wichita Gun Club.

Dr. C. F. Taylor—Leather Physician's bag by Russell Company.

Dr. E. E. Tippin—Pistol shooter by Wichita Gun Club.

Dr. E. H. Terrill—Ampoule set by Ciba Co.

Dr. J. B. Fisher—Medal by Wichita Gun Club.

Dr. L. A. Sutter—Rifleshooter trophy by the Wichita Gun Club.

Dr. E. H. Terrill—Rolls Razor by Rolls Razor Co.

Dr. M. W. Hall—Surgeon's Apron by the Surgitex Co.

Dr. J. B. Fisher—Medal by the Wichita Gun Club.

The Committee on Golf and Trap Tournaments, Dr. J. W. Shaw, Wichita, Dr. L. A. Sutter, Wichita, Chairman, have asked that the Journal acknowledge with appreciation the courtesy of the concerns and individuals which donated prizes.

## COUNTY SOCIETIES

A meeting of the Anderson County Medical Society was held in Garnett on May 18.

Members of the Brown County Medical Society and their wives held a dinner-meeting in Hiawatha on June 24.

Dr. E. A. Marrs, Sedan, and Dr. Estelle Edwards, Cedar Vale, were re-elected president and secretary respectively of the Chautauqua County Medical Society at a meeting on May 4 in Sedan. Dr. J. D. McMillian and Dr. A. Boes, both of Coffeyville, spoke on "Goitres" and "Diseases of the Heart", respectively.

The Clay County Medical Society held its regular monthly meeting in Clay Center on June 22. Dinner was followed by a talk given by Dr. L. R. Pyle of Topeka on "The Diagnosis and Management of Dysmenorrhea".

The regular meeting of the Clay County Medical Society was held in Clay Center on May 18. Dr. J. Milton Singleton, Kansas City, Missouri, spoke on "Obstetrical Analgesia and Anaesthesia".

The 50th Annual Meeting of the Golden Belt Medical Society was held in Manhattan on July 7. Speakers on the program and their subjects were as follows. Dr. James Danglade, Kansas City, Missouri, "Latent Syphilis"; Dr. F. C. Helwig, Kansas City, "The Relationship of Ovarian Hormones to Benign and Malignant Lesions of the Breast". Approximately seventy-five members attended the program.

Harvey County Medical Society sponsored a crippled children's clinic during May in cooperation with the Kansas Crippled Children's Commission. Dr. A. F. Bence, Wichita, conducted the clinic.

The Kiowa County Medical Society was organized on April 29 and was granted a charter at the 79th Annual Session of the Society.

Thirty physicians from Miami and Franklin County Medical Societies attended a dinner at Osawatimie on June 29 as the guests of Dr. Ralph M. Fellows, superintendent of the Osawatimie State Hospital. This meeting was the twenty-first annual meeting of the two societies.

Dr. Ernest H. Decker, Topeka, spoke on "Skin Diseases" at a meeting of the Osage County Medical Society in Lyndon on May 26.

Pratt County Medical Society in conjunction with the Kansas Crippled Children's Commission recently sponsored a crippled children's clinic for the children of that community.

The Rush-Ness Medical Society met in La Crosse at the office of Dr. W. J. Singleton on May 5 for a business meeting.

Dr. D. M. Diefendorf, Waterville, was host to the members of Marshall and Washington County Medical Societies on June 23 at a dinner-meeting of the two societies. Dr. Arthur Hertzler, Halstead, was the guest speaker.

The Washington County Medical Society held its regular meeting in Washington on May 17. Members of the dental society of that county were guests of the physicians.

The Marion County Medical Society held a meeting in Marion on July 6 with members of the Marion County Bar Association as guests of the society. A medical motion picture was shown after the dinner.

The Marshall County Medical Society sponsored public meetings on cancer in Blue Rapids and Waterville on April 25 and April 12 respectively. Dr. B. W. Lafene, Marysville, Dr. J. W. Randell, Marysville, and Dr. D. M. Diefendorf, Waterville were speakers at the meetings.

Members of the Wilson County Medical Society were entertained at the home of Dr. and Mrs. E. C. Duncan in Fredonia on June 24.

## MEMBERS

Dr. Clovis W. Bowen, a recent graduate of University of Kansas School of Medicine has opened an office in Valley Falls.

Dr. Lerton V. Dawson, formerly of Ottawa, has moved to Clinton, Missouri.

Dr. C. E. Gollier has opened an office in Independence. He will maintain his former office in Elk City and spend a portion of his time in practice there.

Dr. Arthur E. Hertzler, Halstead, spoke before the Tennessee Valley Medical Association at Knoxville, Tennessee on June 23.

Dr. G. H. Penwell formerly of Topeka has gone to Russell to join the staff of the Russell Hospital.

Dr. Lloyd Reynolds of Akron, Ohio, has moved to Hays where he will be associated with Dr. C. D. Blake.

The following doctors are now members of the staff of the Osawatimie State Hospital at Osawatimie: Dr. E. Eisner, formerly of Menninger Sanitarium, Topeka; Dr. M. M. Cohen, of Ellis Island Marine Hospital; Dr. Anton Cziarky of the Trinity Lutheran Hospital, Kansas City, Missouri; and Dr. Samuel Nelken, of New Orleans, Louisiana.

# for dependable help in diagnosing and treating skin diseases

## USE THESE

Diseases of the skin are a matter of considerable concern to most physicians. It is frequently difficult to make a correct diagnosis—and equally as hard to successfully treat these cases. Because of this a constant search is going on for help in this class of cases. The two Sutton books briefly described on this page offer you dependable help in correctly diagnosing your skin cases—and tell you how to treat such cases.

by

**R. L. SUTTON**, Professor of Dermatology, University of Kansas, School of Medicine, and **R. L. SUTTON, JR.**, Instructor in Dermatology, University of Kansas, School of Medicine

## The COMPLETE Reference DISEASES of the SKIN

If you want a complete reference book—a textbook and an atlas combined—"Diseases of the Skin," with its 1433 pages and 1310 illustrations, will be the solution to your needs. Since 1917 this book has been a leader. The present NINTH EDITION is better than ever. It will help you to correctly diagnose your case—and tell you how to treat it. The symptomatology, diagnosis, and treatment of the various disorders of the skin are presented clearly and simply. Particular emphasis has been placed on pathology and treatment. The majority of the therapeutic measures recommended are those which the author has found useful and practicable in his own private and dispensary practice.

**DISEASES OF THE SKIN—9th Edition.**  
1433 pages, 1310 illustrations. Price, \$12.50.

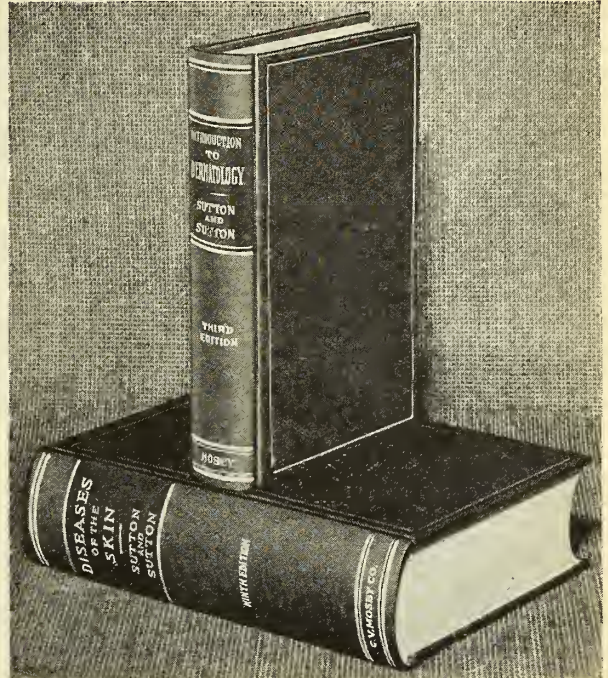
**THE C. V. MOSBY, COMPANY** KMJ-7-38  
3525 Pine Blvd., St. Louis, Mo.

Gentlemen: Send me the Sutton book checked with (X), charging my account.

- ☐ DISEASES OF THE SKIN—\$12.50  
☐ INTRODUCTION TO DERMATOLOGY—\$5.00

Dr. ....

Address.....



## The HANDY Reference INTRODUCTION TO DERMATOLOGY

If you want a smaller book—less extensive, but equally as accurate, "Introduction to Dermatology" will satisfy. Completely rewritten and improved by the addition of 45 new illustrations. Much new information regarding therapy has been introduced into this new Third Edition. The section on syphilis has been enlarged.

This book, based on the larger text, combines judiciously the viewpoints of the senior author and the newer points of view of the junior author, retaining, however, the original latticework of fundamental facts which contributed so much to the value and popularity of the parent volume, and omitting much descriptive and statistical matter which is of interest to only the research worker and the specialist.

**INTRODUCTION TO DERMATOLOGY**  
—3rd Edition. 666 pages, 229 illustrations.  
Price, \$5.00.



Dr. H. J. Brown formerly of Oklahoma City, Oklahoma, has joined the staff of Drs. Snyder, Jones, Snyder and Snyder of Winfield.

Dr. J. F. Hassig, Kansas City, was a guest speaker on the program of the 59th annual convention of the Kansas Pharmaceutical Association held in Topeka, March 21-24. His subject was "Coordination of Allied Physicians".

Dr. J. L. Evans, Wichita, recently donated his library of surgical journals to the library of the St. Francis Hospital in Wichita.

Dr. M. J. Renner, of Goodland was one of the several Kansas pilots selected by the United States Post Office Department to fly the mail during National Air Mail Week of May 15 to 21.

Dr. Mark D. Ballard, Baldwin, has opened new offices in the Ives-Hartley Building in that community.

Dr. H. S. Dennie, Almena, and Dr. M. J. Renner, Goodland, flew their own planes to the 79th Annual Session of the Society held in Wichita in May.

Dr. K. Armand Fischer, Arkansas City, is taking a postgraduate course in the Hospital for the Ruptured and the Crippled in New York City for one year.

Dr. C. E. Gollier formerly of Elk City, has opened offices in the First National Bank Building in Independence.

Dr. J. E. Hawley, Burr Oak, president of the Jewell County Medical Society, was honored by that organization on his 86th birthday with a special meeting of the society.

Dr. S. M. Hibbard, Sabetha, was elected mayor of that city to serve for a term of one year.

Dr. L. A. Proctor, Parsons, is taking a postgraduate course in internal medicine in a hospital in Philadelphia, Pennsylvania.

## ANNOUNCEMENTS

The Twenty-Third Annual Session of the American College of Physicians will be held in New Orleans, March 27-31, 1939. Dr. John H. Musser of New Orleans will be in charge of the program.

The Seventeenth Annual Clinical Session of the American Congress of Physical Therapy will be held cooperatively with the Twenty-Second Annual Convention of the American Occupational Therapy Association September 12-15, 1938 at the Palmer House, Chicago. Information concerning the meeting may be obtained from The American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago, Illinois.

The Annual Meeting of the American Association for the Study of Goiter will be held from September 12-14 in Washington, D. C., in conjunction with the Third International Goiter Conference. Headquarters of the meeting

will be at the Mayflower Hotel. For further details write Dr. W. Blair Mosser, of Kane, Pennsylvania, Corresponding Secretary of the Association.

The next written examination and review of case histories of Group B applicants by the American Board of Obstetrics and Gynecology will be held in various cities of the United States and Canada on Saturday, November 5, 1938. Last date for applying is September 5, 1938. Application blanks and booklets of information may be obtained from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh, Pennsylvania. Applications must be filed in the Secretary's office not later than sixty days prior to the scheduled dates of examinations.

## DEATH NOTICES

Henry Darwin Smith, 63 years of age, died at his home in Washington on July 19. Dr. Smith, moved to Washington as a small boy and attended the public schools. He received his medical education from the Corner University of Lincoln Nebraska medical school and was graduated in 1900. He later took postgraduate work at the Chicago Clinic School. Dr. Smith was commissioned Captain and Assistant Surgeon in the 20th Kansas Regiment of the Spanish-American War in 1898. He also served in the World War being commissioned Major and Surgeon of the 139th Infantry, 35th Division. He was mayor of his community three times and was president of the Washington County Medical Society at the time of his death.

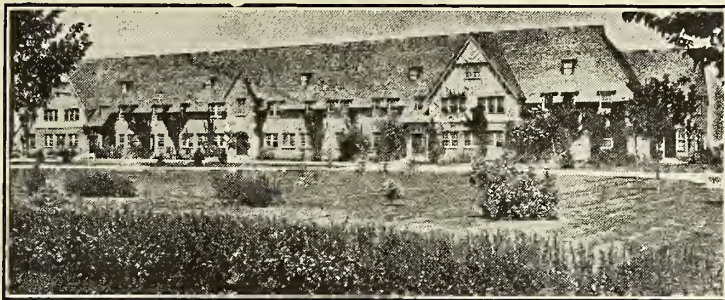
## BOOK REVIEWS

MEDICAL WRITING—THE TECHNIC AND THE ART—By Morris Fishbein, M. D. Published by the Bureau of Publications, American Medical Association. This is the streamlined successor of other books by the same author and Dr. George H. Simmons. The subject matter has been revised and new material added to widen its usefulness. In the chapter on the acceptable paper the statement that "A manuscript that is fit to read is sometimes fit to print, but a manuscript that is fit to print is always fit to read", will appeal to all editors. The chapter on style is most interesting, giving apt and amusing examples of fancy writing, slang and verbosity in medical writing. There is a comprehensive discussion of different types of articles, their construction, preparation and revision. Bibliographical material and proofreading are especially well covered. Any young physician and a majority of veterans with literary ambitions will read Dr. Fishbein's latest book with profit.—W. M. M.

OPERATIVE GYNECOLOGY—By Crossen and Crossen, 5th edition. C. V. Mosby Company. \$12.50.

This text, now in its fifth edition, continues to maintain the high standard for which it has been known in the previous editions. Enlarged, and in the main rewritten, it still is arranged in the systematic, convenient, logical manner of its previous editions. Each subject is approached with the idea that the treatment should be adapted and modified for the individual case—or as Dr. Crossen expresses it in the Preface, "... we have held

# WOODCROFT HOSPITAL



## PUEBLO, COLORADO

Founded 1896 by Dr. Hubert Work

A modern, newly constructed sanitarium for the scientific care and treatment of those nervously and mentally ill, the senile and drug addicts.

**CRUM EPLER, M.D.**  
Superintendent

## 16,000

ethical



Since 1902

## practitioners

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

## \$1,500,000 Assets

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited with the State of Nebraska**

for the protection of our members residing in every State in the U.S.A.

**PHYSICIANS CASUALTY ASSOCIATION**

**PHYSICIANS HEALTH ASSOCIATION**

400 First National Bank Building

OMAHA - - - NEBRASKA



Since 1912



The Lassen's dining service enjoys a well-won reputation for an excellence of food and service the most exacting guest can require. Here the leading conventions, of professional and business men are held. The Lassen cordially invites the members of The Kansas Medical Society to sojourn at this fine hotel when visiting Wichita.

HENRY HAYN, MANAGER

**HOTEL LASSEN**  
Wichita, Kansas

## Alcohol — Morphine — Barbital

Addictions Successfully Treated Since 1897 by the Methods of Dr. B. B. Ralph



Write for descriptive booklet

**THE RALPH SANITARIUM**

Ralph Emerson Duncan, M.D.

Director

529 Highland Ave.

Kansas City, Mo.

Telephone—Victor 4850

Approved by the Council on Medical Education and Hospitals of the A.M.A.



to the idea of selective treatment as emphasized in previous editions—that is, the selection of the operative measure most suitable for the particular modifying conditions present in that patient, instead of trying to apply one operation to all cases of a lesion, regardless of type and details."

Each type of condition is taken up in a separate chapter (Ovarian and Parovarian Tumors, Pelvic Inflammation, Myoma and Adenomyoma of the Uterus, Retrodisplacement of the Uterus, Cancer of the Uterus, etc.) and considered in a general way first—consideration of all the operations suitable, points of general technique, development of technique, etc. Then the detailed description of each operation is presented with its modifications. Where radiation is suitable, it is also fully discussed. The illustrations are excellent, and are generally provided to aid in visualization of each step of the procedure. At the conclusion of the chapter is a consideration of all the methods of treatment, giving indications and contraindications, advantages and disadvantages, and leading the reader to his choice of the proper procedure for each individual case. The role of complicating conditions is also considered.

There are chapters on the "Urinary Tract" and the "Intestinal Tract" in their relation to Gynecologic Surgery. The former is primarily concerned with the management of injuries to the bladder and ureter in pelvic operations, and certainly deserves a place in a volume on Gynecologic Surgery. The latter however, seems to this reviewer to be partly superfluous in such a work. In a detailed consideration of such things as carcinoma and diverticulitis of the colon, abdominal tuberculosis, hernia, and some of the rectal lesions, it is going into a field which hardly can be included in gynecology. There are also, of course, associated intestinal lesions which should be, and are, discussed in this chapter—such as the treatment of injured intestine, and the technique of "incidental" appendectomy. Parts of this chapter could well be omitted.

The chapter on "Anesthesia", in showing a preference for nitrous oxide and ether, gives one the impression of condemning a new anesthetic merely because it is new. Thus are cyclopropane, spinal, and intravenous anesthetics quickly dismissed. Ethylene also is discarded, because of the possibility of explosion connected with its use.

I would find it difficult to make any suggestions for improving the main part of this book. It seems to me to have all the qualities that a good medical text should have—it is complete; it is concise; it is arranged in a manner that makes important facts really accessible; and it is written in a style that is easy to read and understand. In addition to these things, it is written by an author who can speak with authority gained from experience. I do not feel that the chapters on the "Intestinal Tract" and "Anesthesia" come up to the high standard of the remainder of the book.—O.R.C.

---

**BARRY**—By Thomas C. Hinkle, M.D. Dr. Hinkle's latest book, Barry, which has just been published by William Morrow and Company is the story of a wolf dog. This is the twelfth book by our distinguished fellow member, who now lives in Onaga, and is fully up to the standard of his earlier writings. Dr. Hinkle's books have had a large sale in Great Britain.—W. M. M.

---

#### HEART FAILURE BY A. M. FISHBERG, M. D.

Few of us are unfamiliar with Dr. Fishberg's earlier work "Hypertension and Nephritis". The author now

presents failure of the circulation in much the same manner. Progress resulting from the introduction of quantitative methods for measuring the circulatory variables in health and disease, and the application of the principles of Starling's Law of the Heart, receive special emphasis.

Circulatory failure is defined in symptomatic terms rather than by a numerical index or by functional tests. A simple classification is presented of heart (central) failure and peripheral circulatory failure. Heart failure may be hypodiastolic, in which there is inadequate filling of the heart due to decreased duration of diastole (paroxysmal tachycardia); or diminished amplitude of diastole (pericardial effusion). The more common type is hyposystolic failure due to improper emptying of the heart chambers. This may be manifested clinically by left heart failure, characterized by pulmonary engorgement, or by failure of the right side of the heart with congestion of the venae cavae and their tributaries.

The cardiac output, velocity of blood flow, circulating blood volume, and venous pressure are then discussed with considerable reference to American and foreign literature.

The individual symptoms of heart failure are analyzed with emphasis on changes in the gas contents and chemical composition of the blood and dynamic alterations, in the pathogenesis of dyspnea (exertional, paroxysmal, and periodic), orthopnea, cyanosis, edema, engorgement and edema of the lungs, and bronchopneumonia. The effects of circulatory insufficiency on the liver and spleen, kidneys and urine, and central nervous system are discussed. The different types of clinical heart disease and heart failure are carefully described and the final chapters are devoted to treatment of heart failure including rest, diet, obesity, surgical operations, pregnancy, the use of digitalis, diuretics, mechanical removal of effusions, oxygen, phlebotomy, thyroidectomy, treatment of disturbances of rhythm, the treatment of individual diseases with heart failure, and shock. The thirty pages on digitalis are probably the most valuable part of the entire volume.

The book contains 788 pages with 25 illustrations and is well indexed. There are frequent typographical errors and misuse of words e. g. page 49, "reiterated" for reiterated; page 92, "dilutes" for dilates; page 686, the average (daily) rate of disappearance of digitalis from the body is 23.5 minims of a tincture standardized to 1 minim per cat unit"; and page 646, "—the slight increase in vital capacity due to the compression of the lungs by the elevation of the diaphragm—". It contains a tremendous quantity of data on this subject well selected and arranged in a readable, orderly manner.—D. C. W.

---

**SURGICAL PATHOLOGY OF THE DISEASES OF THE NECK**—By Arthur E. Hertzler, M.D., Halstead, Kansas. Published by J. B. Lippincott and Company. This book is the ninth of a series of monographs on surgical pathology and is to be followed by one more volume on the mouth and jaws. The volume just received is most interesting since it relates the personal experience of Dr. Hertzler in this field with no attempt to include lesions of the thyroid gland. He believes that the life history of the patient and the clinical findings are quite as important in making a diagnosis as the microscopic slide and so has made his book largely a clinical and operating room study.—W. M. M.



## Cosmetics and Your Patient's Morale



THE DOCTOR IS OF NECESSITY A STUDENT OF LIFE. Each new patient presents a new study, a new problem. Psychology plays an important role in the course of treatment he prescribes. With some patients he must be frank to a point of harshness, with others he must be gentle and coaxing. The nature of the illness and, more particularly, the nature of the patient determine his attitude. He knows from experience the value of bolstering his patient's morale. As a student of psychology he knows that few things are more depressing to a woman than the fear that she is losing her charm, that when she no longer cares how she looks the chances are she has lost touch with a vital interest in life. And because he appreciates the importance of a sensible interest in personal appearance he quite rightly encourages his patients to look their best at all times. FINE COSMETICS appeal to that interest. That is why they deserve to be recommended by doctors who are, after all, greatly concerned with their patient's morale.

---

**LUZIER'S, INC., MAKERS OF FINE COSMETICS & PERFUMES**

---

KANSAS CITY, MO.



Management of the Sick Infant and Child by Langley Porter, Dean, University of California Medical School and Professor of Medicine; and William E. Carter, Director, University of California Hospital Out Patient Department. Fifth edition. 874 pages, 94 illustrations. Price \$10.00.

In the relatively specialized field of Pediatrics, a great many methods of treatment have been developed not generally used by the general practitioner or the internal medical man. Porter and Carter have improved an already highly used and valuable book on the treatment of sick infants and children. The eight hundred and more pages are divided into three parts: the first of which discusses individual symptoms, e.g., diarrhea, convulsions, vomiting; the second part consists of brief description and differential diagnosis of disease of the various systems and their specific treatment; the third part and probably the most interesting, contains illustrated descriptions of special methods of treatment, formulas and recipes, and a complete formulary. To point out some of the many excellent qualities of this book, one might mention the very practical discussion on infantile eczema, the specific dosage of each drug in reference to age and weight, and the excellent and numerous illustrations. The discussion on the treatment of acute hemorrhagic nephritis seems a little inadequate, if not outmoded.

On the whole this book can be recommended to either the general practitioner or specialist as one of the more intelligently written, up-to-date and useful books in the field of children's diseases.—L. E. E.

#### NEW BOOKS RECEIVED

**THE COMPLETE PEDIATRICIAN**—Second, Completely Rewritten Edition. By Wilburt C. Davison, M. D., Professor of Pediatrics, Duke University School of Medicine. Published by the Duke University Press, Durham, North Carolina, at \$3.75 per copy. In nine sections including: Diagnosis; Diseases; Treatment, Fluid and Blood Administration; Feeding, Diets and Nutrition; Drugs and Prescriptions; Laboratory Tests; Preventive Measures and Child Care; Growth, Development and Guidance of Children; and Instructions for Taking Histories and Making Physical Examinations.

**THE 1937 YEAR BOOK OF GENERAL MEDICINE**—Edited by George F. Dick, M.D., Lawrason Brown, M.D., George R. Minot, M.D., William B. Castle, M.D., William D. Stroud, M.D., and George B. Eusterman, M.D. Published by The Year Book Publishers, Chicago, Illinois, at \$3.00 per copy. Octavo 832 pages with 159 illustrations and two color plates. In five parts, including: Infectious Diseases; Diseases of the Chest; Diseases of the Blood and Blood-Forming Organs; Diseases of the Kidney; Diseases of the Heart and Blood Vessels; Diseases of the Digestive System and Diseases of Metabolism and Nutrition.

**THE 1937 YEAR BOOK OF GENERAL SURGERY**—Edited by Everts A. Graham, M.D., Professor of Surgery, Washington University School of Medicine, St. Louis, Missouri. Published by The Year Book Publishers, Chicago, Illinois, at \$3.00 per copy. Octavo 827 pages with 335 illustrations and one color plate. Includes sections on: Anesthesia-Analgnesia; Asepsis and Antisepsis, Operative Technic; Wound Healing and Pathologic Interventions; Tetanus; Malignant Tumors; The Blood Vessels; The Bones; Fractures—General; The Joints; The Scalp and Skull; The Brain and Meninges; The Face and Mouth; The Neck; The Thyroid; The Mamma; The Chest; The Surgical

Treatment of Pulmonary Tuberculosis; The Heart and Pericardium; Abdominal Surgery—General; Peritoneum, Mesentery and Omentum; The Stomach and Duodenum; Intestinal Surgery—General; The Small Intestine; The Vermiform Appendix; The Large Intestine; Hernia; The Liver; The Gallbladder and Bile Ducts; Cholecystography; The Pancreas; The Spleen; The Spine and Cord; The Upper Extremity; The Lower Extremity; Orthopedic Surgery; and Appendix on the Injection Treatment of Hernia.

**THE ENDOCRINES IN THEORY AND PRACTICE**—Articles republished from the British Medical Journal by P. Blakiston's Son & Co., Inc., Philadelphia, Pennsylvania, at \$3.50 per copy. Washable cloth, Octavo 278 pages. For the "newly qualified, the man in general practice, and the specialist". Includes sections on: The Present Position of Endocrinology; Hormones of the Anterior Lobe of the Pituitary Gland; The Relation of the Hypothalamus to the Pituitary Gland; On Hyperpituitarism; Extract of the Posterior Lobe of the Pituitary Gland; Laboratory Tests for the Early Diagnosis of Pregnancy; Pituitary Tumors; Their Classification and Treatment; Chemistry of the Thyroid Gland; Physiology of the Thyroid Gland; The Problem of Endemic Goitre; Clinical Aspects of Hyperthyroidism; Cretinism and Myxoedema; Thyroid Extract in Conditions other than Myxoedema; Physiology of the Adrenal Gland; Addison's Disease and Suprarenal Insufficiency; The Adreno-Genital Syndrome and Tumors of the Suprarenals; The Chemistry of Oestrogenic Compounds and Methods of Assay; The Chemistry and Assay of Male Hormones; The Physiology of the Endometrium and Uterine Muscle, and of the Ovarian Cycle; Hormone Deficiencies in the Male; The Hormone Treatment of Some Disorders of Pregnancy; Hormones in the Treatment of Menstrual Disturbances; The Menopause; Thymus and Pineal Glands; The Parathyroid Glands; Hyperparathyroidism; and The History of Endocrinology.

**MENTAL THERAPY: A Study In Fifty Cases**—By Louis S. London, M.D., Assistant Physician Central Islip State Hospital, Central Islip, New York. In two volumes, published by Covici-Friede, New York, New York, at \$12.50 per set. The book is divided into six parts. Part I is entitled Metapsychology, and describes the historical evolution of psychotherapeutics. Part II discusses case histories of the neuroses. Part III deals with the graver paraphillias (sexual perversions.) Part IV includes cases that are borderline between neuroses and major psychoses. Part V concerns schizophrenia (dementia praecox) and with paranoia. Part VI contains a discussion of the manic depressive (cyclic) psychoses, and the conclusions show the significant inter-relation between the psychoses and neuroses. Includes a glossary of psychiatric terms. Octavo 774 pages.

**CANCER—WITH SPECIAL REFERENCE TO CANCER OF THE BREAST**—By R. J. Behan, M. D., Dr. Med. (Berlin), F. A. C. S., Cofounder and Formerly Director of the Cancer Department of the Pittsburg Skin and Cancer Foundation, Pittsburg, Pennsylvania. Octavo 844 pages with 168 illustrations. Published by The C. V. Mosby Company, St. Louis, Missouri, at \$10.00 per copy. In 29 chapters including: General Consideration of Cancer; Etiology of Cancer, Especially Cancer of the Breast; Etiology; Pathology; Pathologic Physiology; Symptomatology; Multiple Tumors; Non-carcinomatous Tumors of the Breast; Diagnosis and Diagnostic Tests; D Biopsy; Metastases; Association of Cancer of the Breast with Cancer in Other organs and With Various Diseases; Prognosis; Treatment-General Consideration; Operative Treat-

# RADIUM

## —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

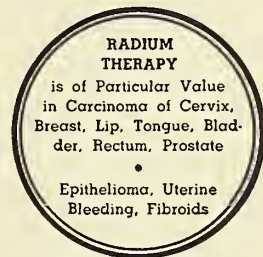
The complete service for Radium users

For details, address

**RADIUM AND RADON CORPORATION**

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO



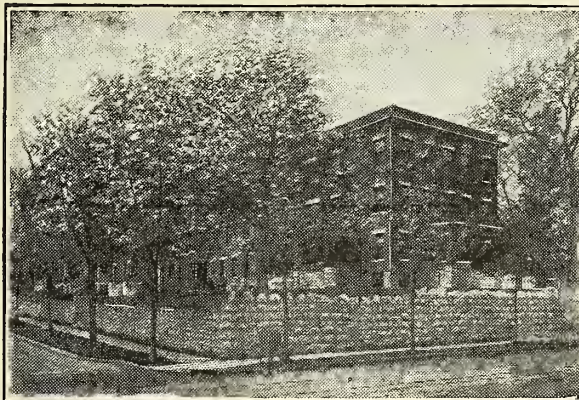
# THE MAJOR CLINIC

3100 Euclid Avenue, Kansas City, Missouri

HERMON S. MAJOR, M. D.  
Medical Director

HENRY S. MILLETT, M. D.  
Associate Medical Director

Electricity  
Heat  
Water  
Light  
Exercise  
Massage  
Rest  
Diet  
Medicine



Nervous  
Diseases  
Selected  
Mental  
Cases.  
Alcohol  
Drug and  
Tobacco  
Addictions

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.



ment; Sequelae of Cancer of the Breast; Constitutional Treatment; Associated Constitutional Treatment; Irradiation Treatment; Radium and Radon; Local Treatment Dosage of Radioactive Agents; and Application of Radiation from X-Ray and Radium.

**CAUSE AND PREVENTION OF DISEASE**—By William Harvey Perkins, M. D., Professor and Director of the Department of Preventive Medicine And Director of the Hutchinson Memorial Clinic, The Tulane University of Louisiana, New Orleans, Louisiana; Formerly Acting Professor of Medicine, Chulalongkarana University, Bangkok, Siam. Octavo, 713 pages. Published by Lea & Febiger, Philadelphia, Pennsylvania, at \$7.50 per copy. In fifty chapters, including among this number: Cause and Effect in Health and Disease; Nutritive Elements in Health and Disease; The Defense Against Nutritional Defects; Poisons Acquired by Ingestion; Poisons Acquired by the Skin and Other Parenteral Tissues; The Effects of Cold and Heat; Defense Against Cold and Heat; The Defense Against Radiant Energy; The Processes and Effects of Invading Organisms; and Psychobiologic and Bisocial Factors and Their Effects.

**SYPHILIS, GONORRHEA, AND THE PUBLIC HEALTH**—Nels A. Nelson, B. S., M. D., F. A. C. S., Director, Division of Genitoinfectious Diseases, The Massachusetts Department of Public Health, and Gladys L. Crain, R. N., Epidemiologist, Division of Genitoinfectious Diseases, The Massachusetts Department of Public Health. Octavo, 359 pages with eight illustrations in the form of charts. Published by The Macmillan Company, New York, New York, at \$3.00 per copy. In seven parts with sub-division under these parts including Attitudes and Approach and sub-divisions, I, Attitudes, and II, Approach, Social Hygiene vs. Public Health. Part II, The Genito-Infectious Diseases, with nine sub-divisions including Syphilis, The Diagnosis of Syphilis, The Treatment of Syphilis, The Communicability of Syphilis, Gonorrhea, The Diagnosis of Gonorrhea, The Treatment of Gonorrhea, The Communicability of Gonorrhea, and Chancroid, Granuloma Inguinale and Lymphogranuloma Inguinale. Part III, The Statistics of Syphilis and Gonorrhea, Part IV The Control of Syphilis and Gonorrhea, Part V, Costs, Part VI, Social Hygiene and Part VII, The Scandinavian Example.

**ELECTROTHERAPY AND LIGHT THERAPY**—By Richard Kovacs, M. D., Clinical Professor and Director of Physical Therapy, New York Polyclinic Medical School and Hospital; Physician in Charge, Physical Therapy, City

Hospital, New York; Attending Physical Therapist, Manhattan and Harlem Valley State Hospitals, Rikers Island Hospital and West Side Hospital, New York, Third Edition, Revised with 306 engraved illustrations and a color plate. Octavo, 744 pages. Published by Lea & Febiger, Philadelphia, Pennsylvania, at \$7.50 per copy. In four parts with thirty-nine chapters including: Fundamental Electrophysics; Current Electricity; Electromedical Apparatus and Accessories; Electrophoresis and Electrolysis; Current of Low Frequency—Clinical Uses; Electrodiagnosis; Diathermy, Clinical Uses; Electrosurgery; Physics of Radiant Energy; Affections of Peripheral Nerves; Gynecological Conditions; Proctological Conditions, etc. The Four Parts are Electrophysics, General Electrotherapy and Electrodiagnosis, Light Therapy, Applied Electrotherapy and Light Therapy.

**OUTLINE OF ROENTGEN DIAGNOSIS**—By Leo G. Rigler, B. S., M. B., M. D., Professor of Radiology, University of Minnesota, Minneapolis, Minnesota. Atlas Edition, 254 illustrations shown in 227 figures, presented in drawings and reproductions of roentgenograms. Figures 6 to 51 and 55 to 72 are drawings in an original technic by Jean E. Hirsch. Octavo, 212, excepting the pictorial atlas in the back of the book with the drawings and roentgenograms. Published by J. B. Lippincott Company Philadelphia, Pennsylvania at \$6.50 per copy. In Eleven Sections including: General Principles of Roentgen Diagnosis; Bones and Joints; Diseases of Spine and Spinal Cord; Skull and Its Contents; Thorax; Digestive Tract; Gallbladder; Abdomen; Urinary Tract; Female Generative Organs; Miscellaneous.

#### CLASSIFIED ADVERTISEMENTS

Morphine and Other Drug Addictions—Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. 28 years' experience. Dr. Weirick's Sanitarium, 162 South State St., Elgin, Ill.

**A Fitting Companion to Wils-edge**

**T H E N U M O N T**

**LIGHT—INCONSPICUOUS—PRACTICAL**

*Complete stock at*

**TOPEKA**

**HUTCHINSON**

**SALINA**

**QUINTON-DUFFENS OPTICAL COMPANY**

*Your Local Independent Wholesaler*

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

SEPTEMBER, 1938

Number 9

## PRIMARY CARCINOMA OF THE LUNG

A CLINICAL STUDY OF 160 CASES IN  
FIVE YEARS

Aaron Arkin, M.D.\*

Chicago, Illinois

Primary carcinoma of the lung was considered to be a rare disease until about ten years ago. At that time only about ten per cent of the cases were diagnosed clinically; today the percentage of correct diagnoses is about fifty, in the larger hospitals and clinics. After a ten year study of this problem I believe that at least ninety per cent of the cases can be diagnosed during life. The physician who familiarizes himself with the pathological and clinical manifestations of primary lung carcinoma can recognize most of the cases from the history, physical examination, and x-ray study. In some cases a bronchoscopic examination, injection of iodized oil, or artificial pneumothorax will be required. The diagnosis can often be confirmed by a biopsy of the frequently enlarged supraclavicular or axillary lymph nodes, by microscopic examination of a pleural effusion, or fragments of tissue in the sputum. When a bronchoscopic examination is made a small piece of tumor tissue can usually be removed for study.

During a five year period I have observed one hundred and sixty cases of primary carcinoma of the lung. In 1936, with the assistance of Dr. David Wagner, I reported one hundred and thirty-five cases seen in four years. This publication appeared in the Journal of the American Medical Association for February 22, 1936. Most of the cases were studied at the Cook County Hospital, the rest in consultation or private practice. Eighty-five cases were confirmed by necropsy, thirty by biopsy, twenty by bronchoscopy, and twenty-five were diagnosed from the characteristic clinical and x-ray findings.

\*Associate Professor of Medicine, Rush Medical College of University of Chicago, Professor and Chairman, Department of Medicine Cook County Graduate School of Medicine, Attending Physician, Cook County and Mt. Sinai Hospitals.

This study has convinced the writer that cancer of the lung is one of the most frequent chronic pulmonary diseases in people past forty years of age. It must always be considered in cases of lung atelectasis, abscess, recurrent pneumonia, hemorrhagic pleurisy, empyema, or chronic pneumonia. Any lung shadow produced by atelectasis or infiltration that cannot be satisfactorily explained on a benign basis must be looked upon with suspicion and its progress studied.

Pain in the chest or in other parts of the body, a cough and bloody expectoration, and sooner or later dyspnoea and loss of weight, are the cardinal symptoms. An area of dulness with suppressed or absent breath sounds and relatively few rales, enlarged supraclavicular lymph nodes, a hemorrhagic pleural effusion, paralysis of a diaphragm or of one vocal cord, a Horner syndrome, or evidence of liver, bone, brain, or other metastases make the diagnosis quite definite. Tuberculosis is usually easily excluded, but may occasionally accompany pulmonary cancer. The roentgen findings are diagnostic in a high percentage of cases, and we shall discuss them later. The bronchoscope is of great value in the diagnosis of those cases in which the growth is primary in the main bronchi, or in which metastatic masses compress or deform the trachea or bronchi. In the many cases which originate in the smaller bronchi or bronchioles the bronchoscopic examination may be negative. Yet these very cases can be readily diagnosed by careful clinical and x-ray study, especially with the aid of bronchography. In about ten per cent of cases the primary growth in the lung may produce no symptoms referable to the lung; the clinical manifestations are the result of metastases in the bones, liver, brain, or elsewhere.

A biopsy specimen from an enlarged lymph node, a bronchus, pleural effusion, fragments of tissue in the sputum, or a piece of tissue obtained by thoracotomy should be obtained whenever possible to complete the diagnosis during life. Unfortunately such specimens are usually obtainable when the disease is well advanced, and almost always fatal. Our only



hope in this disease depends upon an early diagnosis before metastases have developed. In this early stage roentgen studies with the aid of iodized oil are indispensable. A few patients have been cured by lobectomy, or removal of one lung.

#### AGE AND SEX

Among the one hundred and sixty cases, one hundred and twenty, or seventy-five per cent have occurred between the ages of forty-one and sixty years. Fifteen patients or about nine per cent were twenty-one to forty years old. The disease is much more frequent in men than in women. There were one hundred and forty-five men, and fifteen women. Perhaps the inhalation of tobacco smoke is an important factor in causing chronic irritation with epithelial metaplasia in the bronchi or bronchioles. If this be true then the incidence in women should increase, now that women are smoking almost as much as men.

#### ETIOLOGY AND PATHOLOGY

We do not know the cause of malignancy in any tissue or organ at the present time. Chronic irritation, chemical, physical, or mechanical, may cause cellular damage followed by increased rate of growth. Hereditary predisposition plays a role in lower animals (Maude Slye), perhaps also in man. The human lung is exposed to numerous irritants, chemical bacterial and mechanical, any one or combination of which may cause the basal epithelial cells of the bronchi to undergo a metaplasia. These basal cells may produce three histologic types of cancer, (1) undifferentiated round or spindle cell, (2) adenocarcinoma, or (3) squamous cell. The primary carcinomas of the lung are bronchogenic in origin, and may arise in any one of the bronchi or smaller bronchioles. About sixty per cent of lung carcinomas arise in the right lung and forty per cent in the left. In our series of necropsied cases the right upper lobe was the most frequent site.

The histologic types vary somewhat in their tendency to produce metastases. The round and spindle cell cancers (formerly mistaken for sarcomas) all presented metastases at necropsy. The mediastinal nodes were affected in one hundred per cent, the abdominal nodes in fifty per cent, bones in twenty-one per cent, and brain in sixteen per cent. The adeno-carcinomas all produced metastases, with forty-eight per cent of the cases revealing bone metastases. The squamous-celled tumors were less malignant, still six of eighteen cases presented brain metastases. Metastases in the liver, adrenals, and kidneys were only one-third as frequent as in the other types.

The great tendency of lung cancer to spread by the blood stream is easily understood. The lung is a

very vascular organ, and the tumor cells have ready access to the pulmonary veins. Hence metastases in the adrenals, liver, kidneys, bones, brain, etc., are frequent. The lymphatics are also usually invaded with involvement of the mediastinal, supraclavicular, axillary, periaortic, perigastric, periportal, and other abdominal nodes. The presence of abdominal tumor masses may easily lead to an erroneous diagnosis.

Associated lung changes are so frequent that they must be understood in order to make a correct diagnosis. These secondary conditions often mask the underlying primary cancer. In many cases stenosis of a bronchus leads to atelectasis of a lobe or an entire lung. Bronchiectases often develop (forty-five per cent of cases). Actual lobar or bronchopneumonia was found in thirty per cent, and chronic pneumonia in twenty per cent. Pleural involvement, often with hemorrhagic exudates was found in fifty per cent. Active pulmonary tuberculosis was found in only four of eighty-five necropsied cases. It is certainly not a factor in the causation of lung cancer. Also pneumoconiosis was rare.

#### SYMPTOMS

The failure to diagnose about one-half of the cases of lung carcinoma in most clinics can be attributed in large part to the great variation in the symptoms of this disease. These symptoms depend upon the location and size of the primary tumor, the secondary changes which frequently develop, and the location of metastases. In a small group the tumor produces no lung symptoms. Some of these can be diagnosed by bronchoscopy if the lesion is in a large bronchus. But this is seldom done when there are no lung findings. In about fifty per cent of our cases the signs and symptoms were predominantly outside the lungs. Of our series of one hundred and sixty cases, seventy-eight, or forty-nine per cent had chiefly extra-pulmonary findings. We have therefore divided our cases into clinical types, as presented in the following table:

Table 1  
Clinical types of lung carcinoma

	Cases	Per cent
Pulmonary .....	82	51
Osseous .....	23	14
Cerebral .....	16	10
Cardiac .....	13	8
Gastro-intestinal .....	12	8
Lympho-glandular .....	10	6
Hepatic .....	4	3
Total .....	160	100

In the pulmonary type the symptoms are usually a cough, hemoptysis, pain in the chest, and dyspnoea. Such a tetrad of symptoms in a person past the age of forty years is very suggestive of carcinoma of the lung. The average duration of symptoms in our

cases was eight months. In a few patients the symptoms dated back three years or longer, in some only a few weeks. In a few cases the first manifestation was an hemoptysis. The cough is usually persistent and fails to respond to medication. It is often associated with a wheeze due to bronchial stenosis or tracheal compression. The sputum is often blood-streaked. Bloody expectoration in the absence of pulmonary tuberculosis or cardiac disease is very suggestive of lung cancer. We have seen a few cases with fatal hemorrhage.

Dyspnoea may be an early or a late symptom. It is produced by stenosis of a bronchus by the tumor or compression of the trachea by lymph node metastases. Often there is lung compression by extensive hemorrhagic pleural effusion. Atelectasis with retraction of the affected side is common. There may be compression of the superior vena cava, or pulmonary vessels, or even a pericarditis. Acute or chronic pneumonia is often a contributing cause.

Pain is the second most frequent symptom. It is more continuous than in any other chest disease, except possibly aortic aneurysm with bone destruction. The pain is due to involvement of the pleura, intercostal nerves, brachial plexus, or bony structures. Metastases in spine or ribs are not uncommon. The pain is often aggravated or induced by percussion. Thoracic pain occurred in ninety-six cases or sixty per cent, and extrathoracic pain in seventy-five cases or forty-seven per cent.

The general effects are mainly loss of weight, weakness, fever, leukocytosis, night sweats, and fatigue. The leukocytosis and temperature occurred in thirty per cent of all the patients. Clubbed fingers developed in about fifteen per cent. The symptoms due to metastases are of great importance, as we shall see from our discussion of the other clinical types.

The osseous type is one of the most frequent. Of forty-two cases out of a total of one hundred and sixty with bone metastases, I have placed twenty-three in this group. The first complaint may be sharp severe pain in the chest wall, often limited to a certain rib, the cervical spine, shoulder region, skull, pelvis, or an extremity. The patient may be admitted with a pathologic fracture as in four of our cases. A careful history usually, but not always, elicits the presence of a cough or hemoptysis. X-ray films of the painful parts usually present osteolytic or osteoclastic metastases. There are irregular small or large areas of bone destruction. We have found them most often in the ribs, skull, pelvic bones, sternum, and ends of the long bones. Large soft tumors may be mistaken for a bone sarcoma. In all cases of osteolytic bone metastases, especially in male

adults, a lung carcinoma must be considered as the primary site. In the differential diagnosis of bone metastases the breast, thyroid and kidney carcinomas, and any other malignancy must be considered.

The cerebral type is the third most frequent. We have included sixteen cases in this category because of the outstanding cerebral findings. Seven of the patients were admitted to the neurologic service. Some were diagnosed as cerebrospinal lues, meningitis, brain abscess, encephalitis, brain hemorrhage or primary brain tumor. In any person of middle age with an abrupt onset of symptoms and signs of a rapidly developing intracranial lesion, a metastasis from lung carcinoma should be considered. Films of the lung should always be taken. Any part of the brain or cord may be affected. A careful neurologic examination should be made in all patients with lung cancer. We found brain metastases in eighteen of seventy-four necropsied cases, or twenty-four per cent, in 1936.

The cardiac type includes thirteen cases in which the heart signs and symptoms predominated, and the lung findings were less evident. The heart, pericardium, and great vessels are frequently invaded by the tumor. In the right upper lobe the superior vena cava is often compressed or invaded, with symptoms of a mediastinal tumor. The clinical findings of a right heart enlargement or failure have occurred in several patients. The pulmonary artery, the veins, the pericardium or myocardium may be invaded. In the type with diffuse carcinomatous lymph-angitis there may be narrowing of many smaller pulmonary vessels. Pulmonary atelectasis, abscess, or pneumonia may contribute to the cardiac symptoms.

The gastro-intestinal type includes twelve cases. The chief cause of the symptoms is the presence of mediastinal or abdominal metastases. Forty per cent of all our necropsied cases revealed metastases in the abdominal lymph nodes. These may form large masses in the periaortic, peripancreatic, perigastric, periportal or retroperitoneal nodes. The liver was enlarged in twenty-five per cent of all our cases, and revealed metastases in forty per cent at autopsy. In several cases a large nodular epigastric tumor was mistaken for a carcinoma of the stomach or colon. Even the x-ray findings may be misleading. We have seen filling-defects due to perigastric metastases with compression or infiltration of the stomach wall. In two cases the metastases led to pyloric or duodenal obstruction. In three patients hemorrhages followed compression with secondary ulceration. Eight patients had jaundice due to compression of the bile ducts. Twelve patients had dysphagia due to compression of the esophagus by mediastinal node meta-



stases. In all, the compression could be demonstrated with thick barium paste on fluoroscopic study.

The lymphoglandular type is produced by extensive metastases in the supraclavicular, cervical, axillary or mediastinal lymph nodes. One of my most valuable aids in diagnosis has been a careful examination for enlarged supraclavicular or axillary nodes. A large hard node is frequently found above or behind the head of the clavicle. The diseases causing the greatest difficulty in differential diagnosis are Hodgkin's disease and lymphosarcoma. Lymphatic leukemia can usually be excluded by the blood examination. When a node is accessible a biopsy should always be done. In ten of our cases large lymph node tumors in the neck, axilla, or mediastinum were the outstanding finding on palpation or x-ray study.

The hepatic type occurs when there are extensive liver metastases with greatly enlarged liver and sometimes jaundice. The liver has weighed as much as four thousand grams in four of our cases. The icterus is usually due to compression of the larger bile ducts or common duct. The liver was enlarged in one-fourth of our one hundred and sixty cases.

#### PULMONARY FINDINGS

The physical findings vary with the size and location of the tumor. In about ten to fifteen per cent of the cases there are no positive lung findings. These early cases present themselves with bloody expectoration, pain in the chest, or cough. Until the tumor produces stenosis of a bronchus with atelectasis, or involves the periphery of the lung, or causes a pleural effusion the percussion and auscultation may be entirely negative. However, the x-ray findings or bronchoscopic picture may be diagnostic.

The endobronchial form produces stenosis of a bronchus and atelectasis. There is dulness with suppressed or absent breath sounds. The chest is retracted with reduced mobility of the affected side. The diaphragm may be elevated and the heart drawn toward the diseased side. The absence of many rales speaks against tuberculosis. Before complete bronchial occlusion there may be harsh tubular breathing.

The hilar or central form is one of the most frequent types, because many of the carcinomas originate in a main bronchus. There is often dulness or flatness on percussion to the right or left of the sternum and heart. I have often found paravertebral dulness to the right or left of the second to fourth dorsal vertebrae. Hard enlarged supraclavicular nodes point to lung carcinoma.

In the nodular type the findings are those of a mediastinal tumor with dulness and pressure symp-

toms. There is often an asthmatic wheeze, brassy cough, distention of the veins of the head and neck, and cyanosis. When flatness extends to the infraclavicular region with suppressed or absent breath sounds the diagnosis is quite easy. A high diaphragm, Horner syndrome, paralysis of a vocal cord, or dysphagia, often develop and assist in making the diagnosis. The abdomen should be carefully examined for an enlarged liver or tumor masses.

There is an apical form of lung cancer of which I have now seen seven cases. This type is characterized by apical dulness or flatness, pain on percussion, palpable hard supraclavicular lymph nodes, severe pain in the lower cervical and upper thoracic spine, with radiation to the shoulder and arm. There is often a Horner syndrome on the affected side. The x-ray reveals a dense homogeneous apical shadow, with destructive changes in the lower cervical and upper thoracic spine and the first two or three ribs. This is the so-called superior pulmonary sulcus tumor of Pancoast. All of our seven cases proved to be carcinoma of the apex of the lung.

The lobar form is seen most often in the upper lobes, where the diagnosis is usually easy. There is a peculiar flatness, often with a convex lower border. The breath sounds are weak or absent, with few or no rales. Cornage breath sounds, flatness, bloody sputum, and enlarged supraclavicular glands are the chief findings. Later a hemorrhagic pleural effusion may conceal the other findings. The bloody fluid should always be examined for tumor cells. The x-ray findings in lung carcinoma will be described in a later publication.

---

### CONGENITAL SYPHILIS

Donald N. Medearis, M.D.

Kansas City, Kansas

Congenital syphilis may be defined as a specific disease of slow evolution caused by the *treponema pallidum*, propagated by transmission through the mother, the fetus becoming infected via the placenta. It has never been conclusively demonstrated that the transmission of syphilis to the fetus from the father could occur without the intermediate infection of the mother. The proposition, which Colles enunciated in 1837, calling attention to the immunity shown by the mother of a syphilitic infant to infection derived from her suckling babe, has received abundant verification through the years; and the present conclusion seems irresistible that the reason for this immunity is that the mother is invariably suffering from the disease, and is protected by her own syphilis. It has been postulated, chiefly by

foreign investigators, that the spirochete may penetrate the spermatozoon in an ultramicroscopic granular form and subsequently undergo normal development, thus infecting the fetus directly from the father; but Carle<sup>1</sup> and Pehu and Pizzera,<sup>2</sup> in their recent writings, exemplify the skepticism with which even the foreign authors receive the evidence of such theories.

The disease, fortunately, is not seen frequently in a private pediatric practice; but it, certainly, is not so rare but that it properly demands the attention of general practitioners, obstetricians, and pediatricians. Dick<sup>3</sup> of the University of Iowa is authority for the statement that syphilis is found in from 2.0 to 3.5 per cent of white children in families of a lower economic status. He estimates that about one per cent of the young men of the better class are infected with the disease, and may logically be assumed to transmit syphilis to their offspring in such proportions that 0.25 per cent of the children of this social stratum become infected. In my own experience a positive diagnosis of congenital syphilis has been made in eight cases of 2000 consecutive office patients, an incidence of 0.4 per cent. Moreover, it is only fair to state that effective prenatal treatment by the obstetricians of this community is largely responsible for keeping the incidence as low as it is.

The pathological changes effected by the spirochete in the child suffering from congenital syphilis are of all degrees of severity and may be found in any organ or tissue of the body. Syphilis may result in a stillbirth or an early neonatal death and yet the autopsy may reveal no demonstrable pathology except the presence of spirochetes. On the other hand there may be lesions widespread over the whole body.

The pathology of osseous syphilis has been justly emphasized in the literature of the past ten years. An understanding of the changes which syphilis brings about in growing bones has made possible the early diagnosis of congenital syphilis by x-ray study when symptoms have been obscure and serological tests inconclusive. Our knowledge of these changes is not complete because the underlying processes set in operation by the *treponema pallidum* are unknown; but there seems to be a derangement in the nutritive supply of the cartilage and the growing shaft of bone very early in congenital syphilis and the osteochondritis which develops is secondary to this. Normal growth at the cartilage shaft junction depends on the orderly development of the proliferative cartilage and the equally orderly invasion of the latter by the steadily advancing capillary network of the shaft with its accompanying cells. In the diseased bone of the syphilitic babe, there is

faulty development of the proliferative cartilage. The cartilage canals with the blood vessels entering the resting cartilage from the perichondrium become much enlarged and cease to be efficient agents for the even distribution of lymph. The cartilage cells are small and deformed, their normal columnar arrangement is lost, and there is an irregular and excessive formation of intercellular substance. There results an unusually heavy deposit of lime salts. Secondly, osteoblastic activity along the cartilage shaft junction is lessened, and the trabeculae of calcified intercellular substance do not show the normal layering with bone. Moreover, the normal destructive processes are in abeyance in the region of the metaphysis, but operate in an abnormally active and lawless manner a little further away in the shaft. Finally, there is, throughout the whole involved end of the shaft, an irregular growth of connective tissue which takes the place of normal marrow and replaces the trabeculae of calcified cartilage or bone wherever these have disintegrated and disappeared.

These pathological changes give rise to rather definite and typical roentgenographic pictures. The dense lattice of calcified cartilaginous material is responsible for the dense shadow at the end of the bone, the characteristic thickened, well defined metaphyseal line seen in the roentgenogram of congenital syphilis. The jags or points in the shadow which, when present, always occur on the cartilage side and give rise to the expression "sawtooth metaphysis", are produced by the deposits of lime salts around the terminations of the cartilage canals. The extensive and lawless destruction of calcified trabeculae which may occur down in the shaft away from the metaphysis gives rise to a submetaphyseal zone of rarefaction in the x-ray film. Such areas of rarefaction may, of course, be of varying extents.

Although the osteochondritis just described is perhaps the earliest and most characteristic osseous change in congenital syphilis; other fairly typical bone lesions may occur. Epiphyseal separation is a common occurrence; but the term is a misnomer because the break regularly occurs through the lattice of brittle calcified cartilaginous intercellular substance or through the subjacent zone of rarefaction. The epiphyseal fragment may be carried backward, forward, or to the side, but quite commonly the shaft becomes impacted into it, and the periosteum is pushed outward into a redundant circular fold. In the older syphilitic infant, periostitis is an increasingly common finding. One layer of periosteal bone forms over another, the characteristic feature being the irregularity with which these periosteal thickenings occur. In older children,



true gummatous inflammations may be found in the bones.

It is not the purpose of this paper to give an exhaustive review of the pathology of congenital syphilis. Holt and McIntosh<sup>4</sup> describe an interstitial hepatitis as the most usual syphilitic lesion of the liver in early infancy. In later childhood, large gummatous tumors and cirrhotic changes may be found. The spleen is usually enlarged in the infant suffering from congenital syphilis but no real characteristic pathology is revealed by microscopic study. "Pneumonia alba" is the characteristic lung pathology in syphilitic infants who are stillborn or who die soon after birth. Any part of the central nervous system may be affected by syphilis. However, syphilitic involvement of the heart and great vessels is unusual. Lesions of the stomach or intestine are not frequent in either early or late congenital syphilis. An acute glomerulonephritis occurs not infrequently in infants suffering from syphilis. This is probably the result of a secondary streptococcic infection complicating the syphilitic rhinopharyngitis so commonly present.

Most physicians are well acquainted with the typical symptomatology of congenital syphilis. No difficulty in diagnosis is experienced when the infant shows a persistent "snuffles" or coryza, a typical dusky red or coppery maculopapular rash, fissures or indolent linear ulcers about the mouth and anus, mucous patches, painful swellings at the extremities of the long bones, pseudoparalysis, and onychia. Splenomegaly and a severe type of secondary anemia are usual associated findings. The most characteristic symptoms of late congenital syphilis are: (1) The notched and peglike incisor teeth and mulberry molars described by Hutchinson, (2) the interstitial keratitis and nerve deafness which complete Hutchinson's triad, (3) syphilitic osteoperiostitis which results in the typical saber shin deformity (4) subcutaneous gummata (5) destruction of the nasal septum producing the "saddle-nose" deformity, and (6) various forms of neurosyphilis including juvenile paresis.

But the florid case which shows typical symptoms is not a diagnostic problem. With more general treatment of pregnant mothers the number of florid cases has been steadily diminishing in recent years. The average case now rarely exhibits more than coryza and a slight eruption, which may be no more than somewhat shiny, and dry, scaly palms and soles. The decision as to the presence or absence of syphilis in patients free from definite symptoms is our chief diagnostic problem. Here we place our dependence upon serological tests and x-rays of bones. Accurate diagnosis in these cases demands a

proper evaluation of the Wassermann test. Roby and Lembeke<sup>5</sup> have expressed the opinion of most recent investigators in the following conclusions: (1) Wassermann reactions of the blood from the umbilical cord reflect almost exactly the condition of the mother's blood at the time of labor. The cord blood is negative if the mother's blood is negative, and positive if the mother's blood is positive. (2) The substance causing the Wassermann reaction passes out of the child's blood within two months leaving the reaction frankly negative if the child does not have syphilis. (3) If the child has syphilis, the Wassermann reaction remains as strongly positive after a number of weeks as it was for the cord blood. More recently Faber and Black<sup>6</sup> have concurred in these conclusions, and credit Fieldes with the discovery in 1915 and statement that, "the Wassermann reaction obtained with blood from the placental end of the cord is not diagnostic of syphilis in the infant but of syphilis in the mother." They cite, among others, the investigations of Cruikshank, Dunham and Moore in support of these facts. They further outline a method of quantitative determination of the amount of syphilitic reagin present in the infant's blood and are convinced that a progressive decline in the amounts of reagin found in serial tests (which can be detected by the end of the first week or sooner) is conclusive evidence of the absence of infection in the infant. It seems well established that the usual Wassermann technique gives results of dependable diagnostic significance only after the age of about three months.

As has been mentioned previously in this paper, congenital syphilis produces specific pathological changes in growing bone early enough to give diagnostic significance to the roentgenographic study of these bones. After careful study of his material at Philadelphia, Ingraham<sup>7, 8</sup> concludes that osteochondritis becomes roentgenographically manifest about five weeks after the fetus is infected, but that periostitis may require four months to develop. He believes that a single roentgenogram obtained when the infant is six weeks old should detect almost every case. He points out that the value of any diagnostic procedure depends primarily on its specificity, on the relative frequency of its occurrence as compared with the total incidence of the disease in question, and on the time interval necessary for its development after the morbid state is produced. There is agreement among roentgenologists that the osteochondritis and periostitis of early congenital syphilis (when typical) can be confused with no other osseous lesions; and practically every infected patient will show diagnostic bone changes sometime within the first six months of postnatal life. McLean

whose exhaustive study of osseous lesions of congenital syphilis was reported in 1931, states that the diagnosis of the disease in the first months of life may be made on roentgen evidence alone in the following types of lesions:

1. Well defined saw tooth metaphyses in the well calcified bones.
2. Deep zones (in the longitudinal axis) of sub-metaphyseal rarefaction.
3. Multiple "separation of epiphyses," with or without impaction, in bones which are not rachitic.
4. Bilateral symmetrical osteomyelitis of the proximal mesial aspects of the tibiae.
5. Multiple circumscribed osteomyelitis of the long bones, shown by the roentgen rays as patchy areas of rarefaction.
6. Multiple longitudinal areas of rarefaction (osteomyelitis) in the shafts of the long bones, sometimes resulting in fracture.
7. Destructive lesions at the mesial or lateral aspects of the metaphyses (foci of rarefaction).
8. Multiple areas of cortical destruction generally seen within a centimeter of the ends of the bones.
9. Double zone of rarefaction at the ends of the bones.
10. Localized periosteal cloaking occurring in more than one bone.

Thus a positive roentgenogram may be considered the most significant diagnostic test during the first three months of life and if we accept Ingraham's conclusion, a single study at six weeks may well replace repeated x-ray examinations throughout this period. The tibia, radius, and ulna are the bones most likely to reveal specific pathology.

Some mention of treatment should be made before closing. The importance of prophylaxis is widely recognized. It is commonly agreed that the mother should be treated during her pregnancy: (1) If she is syphilitic, whether the disease was acquired at the time of conception or later; (2) if the father is known to be suffering from syphilis, whether the mother has symptoms or not, and (3) if the mother has ever previously shown signs of syphilis and still gives a positive Wassermann reaction, even if she has had no active symptoms for a considerable period, and even if she has previously given birth to a non-syphilitic child. For the treatment of the patient suffering from congenital syphilis, physicians still rely upon the therapeutic triad of heavy metals, arsenic, bismuth, and mercury. Most American writers<sup>4, 6</sup> believe that, since anti-syphilitic treatment is not without risk, it is a grave matter to enter into a long course of treatment in a child who may not have syphilis; and they advise that specific therapy be withheld until the diagnosis of syphilis

is definitely established clinically, serologically or by x-ray. Reuss and Hassmann,<sup>10</sup> on the other hand, urge the treatment of all children of seropositive mothers,—indeed, of all children of parents who have had syphilis at any time. There is essential agreement that the preferred program of therapy is the one which employs adequate—though, not necessarily large—doses of the drug over long periods of time rather than a more intensive course.

It is not the purpose of this paper to make a critical review of all the antisyphilitic drugs or the various plans of treatment. It will suffice to mention that recent pediatric literature<sup>11,12,13,14,15</sup> shows an increasingly large number of favorable reports on the use of acetarsone in the treatment of congenital syphilis. This may be given by mouth, and has the further advantage of low cost coupled with proven effectiveness. The recommended dosage throughout a nine-week course of the drug is five milligrams per kilogram of body weight per day for one week; ten milligrams per kilogram of day the second week; fifteen milligrams per kilogram a day the third week; and then twenty milligrams per kilogram a day for six more weeks. During such treatment, urinalysis occasionally reveals albuminuria and a few red blood cells in the sediment; but there are practically no serious urinary changes. Eosinophilia is a rather persistent finding. Real toxic symptoms are infrequent. My own experience with both private and clinic patients has been in accord with these published reports.

In conclusion, I would emphasize: (1) The importance of the early bone lesions in congenital syphilis, making possible early positive diagnosis by x-ray in clinically doubtful cases; (2) the unreliability of serological diagnosis before the third month; (3) the effectiveness of adequate treatment of the syphilitic mother during her pregnancy in assuring the birth of a child free from the disease; and (4) the advantages of oral treatment of most syphilitic infants with acetarsone.

## BIBLIOGRAPHY

1. Modern Conceptions of Hereditary Syphilis. M. Carle, *Ann. de dermat. et. syph.* 4: 106 (Feb.) 1933 (ab. American Journal Diseases Children. 49: 768).
2. Syphilitic Contamination of the Embryo and the Fetus: Actual State of the Question. M. Pehu and G. Pizzerra, *Rev. franc de pediat.* 9:401, 1933 (Ab. American Journal Disease Children. 49: 1332).
3. Notes on Syphilis in Children. Mark W. Dick, *Journal Iowa State Medical Society*, 27: 191, 1937.
4. Congenital Syphilis. Holt's Diseases of Infancy and Childhood. L. Emmett Holt, Jr. and Rustin McIntosh, Tenth Edition Revised, 1936, pp. 1088-1117.
5. The Meaning and Reliability of Umbilical Cord Wassermann Tests. Joseph Roby and Paul A. Lembeke, *Am. J. Syph.* 17: 473 (Oct.) 1933. (*American Journal Disease Children*) 49:501).
6. Quantitative Wassermann Tests in Diagnosis of Congenital Syphilis. Harold K. Faber and William C. Black, *American Journal Disease Children*. 51:1257, (June) 1936.
7. Roentgen-positive Seronegative Infantile Congenital Syphilis. Norman R. Ingraham Jr., *American Journal Disease Children* 50:1444 (Dec.) 1935.
8. The Lag Phase in Early Congenital Osseous Syphilis. Norman R. Ingraham Jr. *Am. J. M. Sc.* 191-819 (June) 1936. (Ab.



American Journal Disease Children 54:124 and the Year Book of Pediatrics 1936, Isaac A. Abt. and Arthur F. Abt.)

9. The Roentgenographic and Pathologic Aspect of Congenital Osseous Syphilis. Stafford McLean, American Journal Disease Children 41:130, 363, 607, 1128, 1411 (Jan.-June) 1931.

10. Prevention of Congenital Syphilis. A. Reuss and K. Hassmann, Wien. Med. Wchnschr 86:800, July 18, 1936. (Ab. The Yearbook of Pediatrics, 1936, Isaac A. Abt and Arthur F. Abt.)

11. Stovarsol (Acetarson) in the Treatment of Congenital Syphilis. H. S. Mitchell, Canad. M. A. J. 33:377 (Oct.) 1935. (Ab. American Journal Disease Children 53:614.)

12. The treatment of Congenital Syphilis with Stovarsol. Wm. Davidson and Arthur H. Birt, Canad. M. A. J. 34:34 (Jan.) 1936. (Ab. American Journal Disease Children 53:614.)

13. Further Observations on the Use of Acetarson in the Treatment of Congenital Syphilis. Alfred D. Traisman, J. Pediat. 7:495 (Oct.) 1935. (Ab. The Year Book of Pediatrics, 1936, Isaac A. Abt and Arthur F. Abt.)

14. Treatment of Congenital Syphilis with Acetarson. R. Gerth, Monatschr. f. Kinderh. 67:146 (Sept.) 1936. (Ab. American Journal Disease Children 54:385.)

15. Stovarsol Treatment of Congenital Syphilis in Chinese Children. P. L. Fan, Chinese M. J. 50:364 (April) 1936. (Ab. American Journal Disease Children 54:386.)

## THE NEGATIVE PHASE OF TYPHOID VACCINATION

Michele Gerundo, M. D.\*

Topeka, Kansas

It is a routine practice to give prophylactic injections of typhoid vaccine, whenever an endemic focus of disease is discovered. Such a measure, which is certainly very useful to limit the spread of contagion, is however, exercised with a lack of certain precautions, necessary to eliminate untoward results. In many instances, when a case of typhoid fever is discovered and the full picture of the disease is already clear, many of the individuals belonging to the close environment of the patient, are either harboring the bacillus or actually in a period of incubation. The question is raised as to whether in such a condition prophylactic immunization against typhoid may prove beneficial to the individuals surrounding the patient or whether it may result in harm to them. Until now, this second point of view has been always neglected and it has been the general belief of practicing physicians that the injection of vaccine, if not absolutely beneficial, will certainly prove harmless.

Wright was the first to call attention to the so-called negative phase during the practice of the typhoid vaccination. During the first days following the vaccination the individual is in a state of hypersensitivity, which lasts for about a week, after which immunity starts to take place. During the period of hypersensitivity to the infection, the individual should be kept away from any source of infection. It is exactly during the negative phase of the vaccination that the individual living in an infected medium or during an epidemic is very much predisposed to contract the disease. Wright's affirmation was not taken into serious consideration

as, of course, the reactions following vaccination were interpreted as due to the vaccine itself, or to the toxicity of the products introduced with the vaccine. The extensive practice of vaccination during the World War and after had practically eliminated such doubt, as a large number of vaccinations had never been followed by ill effects. There remains, however, open to question, the interpretation of some bad effects observed soon after vaccination.

Before entering on a discussion of the subject, I will report first a typical case, in which the onset of the disease and the death may doubtless be attributed to the vaccination.

### CASE REPORT

A case of typhoid was discovered in a family. The patient was a young lady about twenty-four years of age and she was diagnosed during the first week by means of a blood culture, which was positive for bacillus of Eberth. The attending doctor, wishing to safeguard the other members of the family, advised them to be vaccinated at once. The advice was favorably accepted and all the members of the family were vaccinated with vaccine from the same vial (vaccine prepared by one of the most reliable firms in the United States.) A young sister of the patient, about twenty-two years of age, in good health, well nourished, without precedents of illness, and feeling well up to that time, received three-fourths of the first dose of typhoid vaccine. Three hours later, she had nausea, vomiting and fever, which were attributed to the vaccine reaction. The second day, the symptoms persisted and became aggravated in the successive days. Admitted to the hospital, she showed all the signs of typhoid fever and a Widal test at the time showed an agglutination of 1:80. Eight days after the injection of the first prophylactic dose and the onset of the first symptoms the patient died. An autopsy was performed at the request of the father and of the attending doctor, both desirous of knowing the exact cause of death. All the other members of the family were well and showed no ill effects from vaccination. The first patient, who by her illness had given rise to the general prophylactic vaccination, was in the meantime improved and afterwards recovered completely from her illness.

### AUTOPSY REPORT

Body of white female, twenty-two years of age, five feet, five inches tall, 120 pounds in weight, no marks, no scars on the skin. Cadaveric rigidity. On opening the abdomen a small amount of fluid is present in the cavity. The sigmoid and the transverse colon, with the ascending and descending portions, have a normal appearance. The cecum is

\*Pathologist, Topeka State Hospital, Topeka, Kansas.

dilated and on shaking gives the impression of containing a large amount of fluid. From the peritoneal surface many small and large indurations are felt lying in the mucosa. The appendix is free from adhesions and presents a normal aspect. The junction of the ileum and cecum is hard, irregular and seems scarred. At regular intervals, for the extension of about two feet from the ileo-cecal valve, many small and large indurations are felt and seen through the peritoneal coat. On resecting all this portion of the intestine and opening the lumen, many typical patches of Peyer and solitary follicles, in various states of maturation, are found inside the lumen. The patches are large, elliptical in shape, with the long diameter parallel to the longitudinal axis of the intestines; they have a grayish surface due to initial necrosis, but no slough is present. The small nodules, corresponding to the solitary follicles, are of the size of a pea; some of them are still in the stage of hyperplasia, particularly in the cecum, while others show a beginning necrosis of the center. The patches of Peyer are present only in the ileum. The glands of the mesentery, near the cecum and the ileo-cecal valve are enlarged and the mesentery itself is of a red congested color. The rest of the intestines and the stomach do not present any important findings. The spleen is about three times the normal size and on section the parenchyma is dark red in color and very friable. The liver is of normal size and color on surface and on section, with numerous pinpoint hemorrhages in the cortex.

In the chest the right lung only shows some edema and congestion of the lower lobe. Heart normal.

On the brain moderate congestion of the vessels in the vertex. No other important findings.

Anatomical lesions: Typhoid ulcers of the ileum and cecum, typhoid splenomegaly.

It is evident from the autopsy report that the disease was just entering the second week. The ulcerations corresponded to that period of time and many follicles were still in the period of congestion and hyperplasia. The colon in this case also showed signs of infection, as many follicular ulcers were present in the cecum and ascending colon, as is practically all the cases in severe infections. Culture taken at the autopsy from the spleen was positive for bacillus of Eberth and the microscopic study of the lesions confirmed the gross findings, which were typical of a typhoid infection.

The young woman had been well up until the time of injection, but the attending doctor, fearing that a full dose might be followed by a strong reaction, thought advisable to give her only three-quarters of

a dose. The symptoms of illness started shortly after the first dose was given and the lesions found eight days later at the autopsy table were those usually found at the beginning of the second week.

The first idea coming to mind is the possibility of contamination of the vaccine or the possibility that the vaccine might have contained live germs. Castellani, first prepared a vaccine containing live germs, attenuated by heating, with the idea that the resulting immunity is more solid by such procedure. While this is true for staphylococcus vaccine, the procedure of Castellani method is not without danger and did not find very much favor. In our case, the vaccine was prepared by using killed germs and from the same vial were taken a number of doses to vaccinate several individuals in the same household. The fact that all the other members of the family showed no untoward symptoms, immediately excludes the possibility of such contamination. We have mentioned such a hypothesis only to rule it out, as the vaccine was prepared by a very reliable firm and the same lot had served to vaccinate a large number of individuals in this community. On the other hand, the addition of preservative in the vials of vaccine ready to be marketed, is still a further guarantee that no live germs will be present by the time the commercial vial is used.

The other hypothesis is that the disease developed following a negative phase. The young girl had been already exposed to the infection and perhaps she was in an incubation period. The injection of the prophylactic dose, by lowering the resistance of the individual, shortened the incubation and changed the picture of a silent form to a rapidly manifesting disease. Considering that the lesions found at the autopsy were those found approximately seven or eight days after the onset of the acute symptoms, it is evident that the true manifestations of the disease started only after the injection of vaccine and all the successive course of illness is certainly dependent upon the negative phase of the vaccination. Such a fact, however, raises a number of questions as to the advisability of vaccination during an epidemic in areas where there already have occurred cases of infection.

It is certainly true that during the World War a large number of prophylactic vaccinations have been given without noting any ill effects from injections in individuals already exposed to the infection. Of course, it must be kept in mind that the individuals so vaccinated were strong, well fit for war labors, and, we may add, were the selected elements, representative of the physical strength of a nation. It is not the same in civilian practice, where the attending doctor must deal with children, women and aged



patients or individuals who are not in the best physical condition to withstand an infection.

The time of absorption of the vaccine is also to be taken into consideration. Vaccines, which are suspensions of bacterins in salt water, are rapidly absorbed, while lipovaccines, which are suspensions of bacterins in an oily vehicle, are slower to be absorbed and present under that point of view a lessened danger for immediate reactions. Beszedka, in order to eliminate the risks of vaccination, prepared sensitized vaccines. Emulsions of typhoid bacilli are left in contact with immune serum for a determined time, after which they are washed freely in order to eliminate any trace of serum and are diluted ready for use in salt solution. The washing of the vaccine by the Bezedka method, in the opinion of Dr. Reichel, is the important step of the whole procedure, as it eliminates a large amount of polysaccharides, to which he attributes the lower resistance and the reactions following immediately the injection of vaccine. I accept fully the point of view of Dr. Reichel, as it applies also to other vaccines. In case of autogenous vaccines, I have usually observed local and general reactions, when the original emulsion was used as vaccine, while the reactions have been mild or absent, when the vaccine was washed several times before use. Old vaccines contain more substances able to give reaction than the freshly prepared vaccines. According to Dr. Reichel, this is due to the fact that, as the suspensions age, the supernatant fluid includes a trace of proteins extracted from the killed bacteria and also some free polysaccharides. The polysaccharides bring about the lower resistance, which would certainly be prevented, if the vaccines were washed and suspended in fresh salt water just before using.

Of course, in my opinion, I consider that lipovaccines, of Le Moignic, have some advantage over the other vaccines suspended in salt water, because of their slow absorption and mild reactions. Strong reactions are always indicative of a pronounced negative phase and in lowering the resistance of the individual, they may favor the infection or accelerate the manifestation of latent infection. It has been suggested that a small dose of vaccine is beneficial in the treatment of typhoid. Of course, such affirmation cannot be proved as, when applied to mild cases, it resulted in being superfluous, because patients recovered from the disease by their own natural resistance and proper handling. In the severe cases, the injection of vaccines is obviously contraindicated, as it proves inefficient to stimulate a defenseless body against the infection. However, as this is not the scope of this paper, I will not enter into a discussion on the therapeutic value of the vaccine.

The case we have presented brings about the question of the advisability of vaccinating all in the environment, as soon as a case of typhoid is discovered. Although the number of accidents following such vaccination is small, it should be always taken into consideration that some danger is always present, with possible result in the loss of life. The scope fixed by the prophylaxis is to eliminate the spread of an epidemic and such a point of view is certainly of capital importance to the health officers or to the doctors in charge of the case. If the individuals belonging to the immediate environment of the patient have been already exposed at the time the health officer reaches there, or exposed soon after the vaccination, such a prophylactic measure will be of no avail, as the course of the disease will not be changed. The incubation period of typhoid is between one or two weeks, while the immunity takes a much longer time to be established. The consequence will be that the prophylactic injection will serve only to lower the resistance of the individual and shorten the period of incubation, if the germs are already present in the organism. Among the laymen is often spread the idea that because they have received an injection against typhoid they are protected against the disease, and they do not take the precautions they would otherwise take, if they knew they were still sensitive to the disease. Such an idea is certainly borne out by the experience with diphtheria, in which the prophylactic dose is already protective for the individual immediately after the injection, and it is not easy to make clear the difference between serum and vaccine or between passive and active immunity.

In case of a local infection, it would be far better, in my opinion, to leave in quarantine all the entire environment until it is sure that all those who were exposed have already developed the disease. An immediate vaccination would not certainly save them from having the infection, but could do them some harm. If, after the period of incubation has passed, none of the contacts had contracted the disease, they could be vaccinated at some later date, without any inconvenience being created by a two weeks delay in the process of immunity. Ordinarily precautions in the presence of the patient or isolation would be sufficient to eliminate new sources of infection and a quarantine period for suspect or exposed cases would prevent those individuals from being carriers of germs elsewhere.

Such absolute abstention from vaccination would certainly be limited only to those cases which have already been in contact with a typhoid patient. In the neighborhood, where individuals have never been in contact with the source of infection, the adminis-

tration of prophylactic vaccination should be the rule, provided that the individuals are kept free from contact for a reasonable length of time, enough to overcome the negative phase of the vaccination.

The case just described is very demonstrative of what a lower resistance may mean in the development of a disease. The sister of the patient, who was the first to fall sick of typhoid, ran a mild course and recovered uneventfully. As to our case, the vaccine injection precipitated the events, giving to the disease itself a mark of severity with signs of colo-typhus.

If death is not always the issue of an infection developed during a negative phase, such a probability should always be present to the mind of the doctors and great precaution taken before starting prophylactic immunization indiscriminately. If the time to establish immunization is taken into account, it will be seen that the immunization of individuals exposed to the infection will not save or attenuate the course of the disease and on the other hand will not protect the society or the environment, where these individuals are allowed to go and spread the germs of infection. In such instances, the isolation of individuals should be the only good policy to follow, as it is the only protective measure for the individual and of the society. To the individual we owe certainly a safe method of prophylaxis and nothing should be attempted, which in our mind, could be supposed to be prejudicial to his health. To the society we owe the guarantee of security of the individual members and such may be accomplished entirely and solely by the isolation of the suspected cases.

#### REFERENCES

Besson: *Technique Microbiologique*, Vol. III p. 830, Masson et C. ie, Editors, Paris, 1924 Cirio e Calabrese-Sulla cosiddetta fase negativa, *Pathologica*, 25:587, September, 1934. J. Reichel—Personal Communication.

## BILATERAL STREPTOCOCCIC EMPYEMA

George B. Kent, M.D., and

Kenneth C. Sawyer, M.D.

Denver, Colorado

Examination of the literature regarding bilateral empyema would lead one to believe that the condition is quite rare. This is probably misleading as the paucity is due to the fact that many cases go unreported and some unrecognized, as is evidenced by the relatively high percentage of undiagnosed cases coming to necropsy.

Keyes<sup>1</sup> reviewed the literature and collected thirty-eight cases from 1916 to 1931, and added three of his own cases. Two of these were in infants and one was a boy aged seventeen years. In the series collected by Keyes twenty-three were children fifteen years of age or younger, and fifteen were adults. Farr and Levine<sup>2</sup> reported 267 cases of empyema in children and found it to be bilateral in seven instances. Ochsner and Gage<sup>3</sup> reported a series of 124 cases of empyema in adults, in five of which there was bilateral involvement. Steinke<sup>4</sup> was able to discover an additional five cases not included in Keyes report, namely, one by Ormes, two reported by Dodds, one by Mason, and in the discussion of Mason's case McGlannan reported a case of bilateral empyema and suppurative pericarditis in a child who recovered following aspiration and operation on each cavity. To this series Steinke has added eight cases, bringing the number of cases of bilateral empyema at the time of his report (1932-1933) to fifty-four. Since then Snow<sup>5</sup> added two cases and Bohrer<sup>6</sup> added six cases in a total series of 265 cases of acute empyema in children. This brings the total to sixty-two, excluding the cases not reported in detail.

Keyes stated there is no record of a recovery of a single individual with bilateral hemolytic streptococcic empyema. Snow, however, has added to the literature the report of a case of bilateral hemolytic streptococcic empyema with recovery. It is for this reason that we wish to report a case of bilateral hemolytic streptococcic empyema occurring in a child aged nine years.

#### REPORT OF A CASE

J. K., a white girl, aged nine years, was seen by us first on December 3, 1936. She complained of chills, fever, pain in the left side of the abdomen, vomiting, and diarrhea of twenty-four hours' duration. The patient's mother stated that she had been completely well, except for a slight cold, until the evening of December 2, when she vomited fruit juice which she had taken. During the night the mother noticed that the patient was restless and had fever intermittently. The next morning the child had a definite chill and complained of a pain in the left side of the abdomen. Her mother took her temperature and found that it was 104 degrees F. A little later in the day the child began coughing and appeared to have a shallow, grunting type of respiration. She preferred to lie in bed on her left side with her extremities drawn up. She complained of pain in the left side of the thorax when she took a deep breath. She was seen in the home and immediately referred to the hospital. The child's bowels had moved eight times during the day.



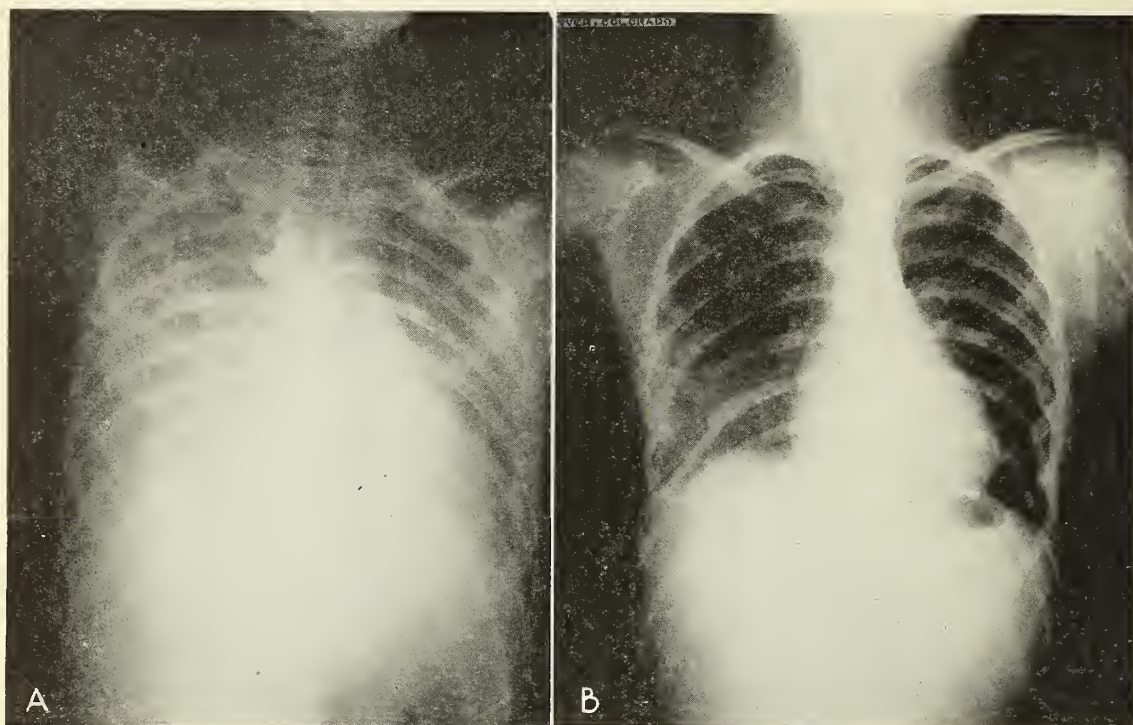


Fig. 1, A, x-ray taken December 3, 1936; B, x-ray taken December 6, 1936

The family history was essentially negative. The child had had chicken pox at the age of six, pertussis at the age of seven, measles at the age of eight, and frequent colds. She had had a tonsillectomy at the age of four for rheumatoid pains of the joints. She had bronchopneumonia in the summer of 1935 and had bilateral otitis media in November, 1935.

The patient was thin, rather undernourished, and appeared to be about nine years old. She was lying in bed on her left side, breathing rapidly. There was a respiratory grunt with each expiration. It was noticed that she had a marked absence of the natural fat pads that give contour to the face. The pupils were equal and reacted to accommodation. There was no nystagmus, and the conjunctivae were clear. Tonsils were absent. The pharynx was slightly injected, the teeth were in good condition and the tongue was clear. The thyroid was not enlarged. There was no adenitis. Examination of the thorax revealed diminished excursion over the entire left side. The respirations were shallow and apparently painful. The thorax was resonant to percussion. There was an area of diminished breathing at the base of the left side of the thorax. There were no rales. The breath sounds were normal throughout the rest of the thorax. Examination of the heart showed the apex beat to be in a normal position. Sounds were clear, rapid, and of good quality. There was a systolic murmur heard over the mitral area,

which was referred to the left axilla. Examination of the abdomen showed a board-like rigidity with marked tenderness in the left flank. Rectal and neurologic examinations were negative. The blood pressure was 114 systolic and 70 diastolic. The temperature was 104.6 degrees F. The pulse rate was 140.

**Laboratory findings:** The blood count showed 39,700 leukocytes, fifty-five per cent polymorphonuclears, eight per cent small lymphocytes, and twenty-seven per cent eosinophils. The urine was yellow and clear, and acid in reaction. There was a faint trace of albumin, no sugar, no acetone, occasional hyaline casts, from four to six pus cells per high power field, epithelial cells, and a few mucus shreds. A portable x-ray examination of the thorax did not disclose any areas of definite pneumonia. (Fig. 1A). There was evidence of thickening of the pleura, pleural effusion or both between the right upper and middle lobes. There was some obliteration of the lung markings in the left lung field. There was some narrowing of the intercostal spaces on the left side.

**Course:** Due to the fact that the child was so extremely ill and by this time had an ashen gray cyanosis it was thought best to put her in an oxygen tent and give her sedatives. December 4, an x-ray examination of the thorax showed evidence of increased effusion between the right upper and middle

lobes. It appeared that there was some early pneumonia in the right lower lobe. There was no change in the appearance of the left lung field. A flat plat of the thorax, taken on December 6, showed a further increase of the effusion so that the whole of the right lung field was obscured. (Fig. 1B). The patient became so extremely dyspneic it was thought advisable to do a paracentesis of the right side of the thorax. At this time 250 c.c. of cloudy, yellow fluid, slightly tinged with blood was aspirated. Smears showed it to be a streptococcic type and the culture later proved it to be a hemolytic streptococcus. This procedure relieved the dyspnea to a great extent. The patient's temperature dropped to 101.4 degrees F. and she appeared to be somewhat improved. On December 11 the temperature again rose to 104 degrees F. and the patient complained of marked abdominal pain. An x-ray of the thorax at this time showed no appreciable change in the appearance of the right lung field, and there was evidence of pleural effusion of the left lung. (Fig. 2A). A paracentesis was done on the left side and 500 c.c. of seropurulent fluid was withdrawn. Culture of this showed hemolytic streptococcus. Repeated daily aspirations were done on both sides of the thorax. On December 27 a closed drainage was instituted by inserting a catheter into the seventh intercostal space in the posterior axillary line on the right side. The same procedure was carried out on the left side on January 1, 1937. The catheters

were irrigated every four hours with 0.2 per cent aqueous solution of gentian violet. The patient was given two 40 c.c. doses of an immune streptococcus serum. She was given 125 c.c. of compatible blood on January 5, 10, 17 and 22. On March 9, 1937 x-ray examination showed a hydro-pneumothorax on the left with a fluid level at the seventh rib in the infrascapular line. There was also free pleural fluid on the left side, as on the last examination. There was only partial collapse of the left upper lobe as the lung markings were seen to extend to the periphery. There was evidence of some pleural effusion or thickening of the pleura remaining on the right side and evidence of some right middle and lower lobe parenchymal involvement. A lateral view showed the fluid was posterior on the right.

Since the patient was still running a septic temperature, on March 10 a left thoractomy was done, resecting portions of the seventh, eighth, and ninth ribs. This appeared to extend to the bottom of the cavity. Next day the patient had a marked reaction from the rib resection. The pulse became rapid and feeble. The patient became markedly cyanotic and dyspneic, and it was necessary to put her back in an oxygen tent. She was given a transfusion again on March 14, and on March 25 the sixth, seventh, and eighth ribs on the right side were removed, and a large tube drain inserted. There was no reaction to this operative procedure. The patient showed progressive improvement. Blood transfusions were

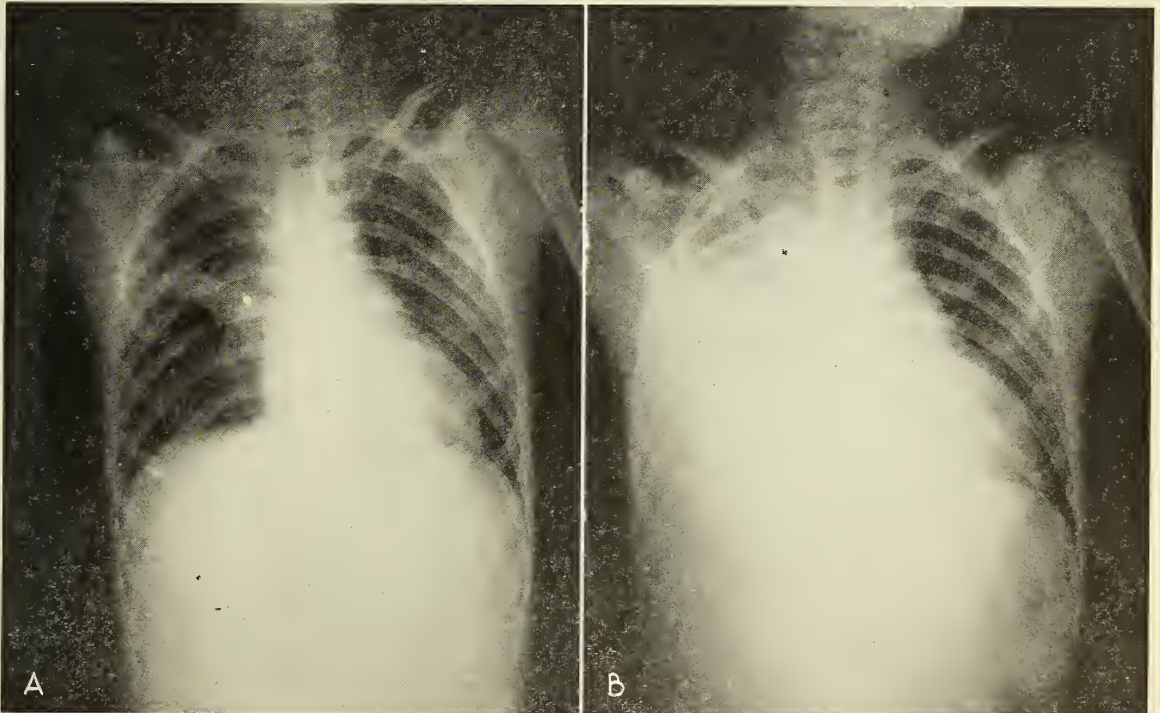


Fig. 2, A, x-ray taken December 11, 1936; B, x-ray taken September 11, 1937.



given on March 26, April 1, and 19. The cavities were irrigated freely with 0.2 per cent gentian violet solution, and each time the size of the cavity was measured and noted.

The patient left the hospital on April 21, 1937, with a temperature of 99.2 degrees F.; both tubes were draining. Instructions were given to the mother as to the care in the home. The tube from the left side of the thorax was removed on April 30. The child began to run a septic temperature. On May 15 the tube was removed from the right side of the thorax. Fifteen grains of prontosil were given every six hours for forty-eight hours, then seven grains were given three times daily. At the end of the forty-eighth hour of prontosil administration the temperature became normal and never returned above the normal mark. The first three weeks out of the hospital the patient gained sixteen pounds.

An x-ray of the chest taken September 11, 1937, disclosed complete disappearance of the empyema of the left thorax. (Fig. 2B). The right lung showed thickened pleura over the operated area; the ribs were not closed entirely, but evidence of disease of the bones was not noticed. The right lower lobe was the site of a low-grade chronic parenchymal inflammatory process presumably a delayed resolution of a previous pneumonic infiltration. Fluid was not noticed in any portion of the pleural region.

#### COMMENT

A case of bilateral hemolytic streptococcal empyema occurring in a child aged nine years is reported. The child was quite ill, running a temperature of 104 degrees F. or higher. Paracentesis was done on both sides, and culture of the fluid that was withdrawn showed it to be hemolytic streptococcus. Thoractomy was performed first on the left side and then on the right side. Numerous blood transfusions were given. The patient left the hospital four and one-half months after admission, at which time both tubes were still draining. Following administration of prontosil the infection cleared, the temperature became normal, and the patient started to gain weight. She is in good physical condition at the present time.

#### BIBLIOGRAPHY

1. Keyes, E. L.: Bilateral empyema of the pleural cavities. *Annals of Surgery* 1931, xciii, 1050-1063.
2. Farr, C. E. and Levine, M. I.: Empyema in children. *Surgery, Gynecology and Obstetrics*, 1928, lvi, 79.
3. Ochsner, A. and Gage, I. M.: Acute empyema thoracis: a statistical study with a comparison of the white and colored races. *Annals of Surgery*, 1931, xciv, 25-37.
4. Steinke, C. R.: Bilateral empyema; report of eight cases. *Journal Thoracic Surgery*, 1932-1933, ii, 287-281.
5. Snow, William R.: Acute bilateral empyema. *Texas State Journal Medicine*, 1935, xxxi, 34-36.
6. Bohrer, J. V.: Acute empyema in children. *Annals of Surgery*, 1934, c, 113-124.

## POST-OPERATIVE FECAL FISTULA

### REPORT OF CASE\*

Maurice A. Walker, M. D., and

Herbert H. Hesser, M. D.

Kansas City, Kansas

A negro, aged twenty, was first admitted to St. Margaret's Hospital, October 14, 1937, with a fecal fistula in a McBurney's incision. In March, 1937, he had been operated on elsewhere for acute appendicitis. The appendix was not removed, but drains were inserted. After their removal, copious discharge of liquid feces persisted, and the skin of the right lower abdomen became rugose, macerated, and ulcerated.

During operation, on October 19, the fistula and surrounding skin were covered with a sheet of rubber. A high right rectus incision was made, avoiding the infected area. The terminal loop of ileum was found to be adherent to the peritoneum inside the scar. A forceps was applied across the edges of this knuckle of ileum, and the bowel freed from the abdominal wall. This internal opening of the fistula, involving one-third the circumference of the ileum, was closed with two layers of catgut suture.

It was then possible to examine the right iliac fossa. The cecum and proximal half of the appendix were free from adhesions or other inflammatory change. The appendix ran downward and medially, ending in a hard fibrous mass six by four by four cm., firmly adherent to the lateral wall of the minor pelvis. Since the tip could not be freed easily, it seemed that the appendix could be removed more safely from the cecal end. The appendix was ligated, clamped distal to the ligature, divided, and both ends phenolized. The meso-appendix could then be clamped, cut, and ligated. In attempting to free the mass at its tip, the appendix was torn open. It was then obvious that, with the limited exposure available, further efforts at removal would involve the dangers of leaving a considerable portion of the appendix attached in the pelvis or of injury to the iliac vessels. As a way out of the predicament, the base of the appendix was brought through the fistula opening and attached to the skin with one stitch. A rubber drain was inserted into the pelvis through the same opening. The omentum was placed to cover the suture line in the ileum and the appendix stump. The rectus incision was sutured without drainage. Convalescence was uneventful.

\*From the Department of Surgery, University of Kansas School of Medicine.

Thereafter there was intermittent discharge of mucus from the newly-made fistula of the appendix.

He was re-admitted to the hospital on December 26, 1937. The skin surrounding the fistula had healed and become smooth. There had been no discharge from the stump of the appendix for several days. Through a low right rectus incision, the appendix was now easily freed from its adhesions in the pelvis, cored out of the abdominal wall, and removed intact.

When re-examined in May, 1938, all incisions were strongly healed. He stated that there had been no discharge of any kind since the last operation.

## X-RAY TREATMENT OF ERYSIPELOID\*

Maurice A. Walker, M. D.,

and

Lewis G. Allen, M. D.

Kansas City, Kansas

Erysipeloid is described as an entity in the textbooks of Ormsby, Sutton, and other dermatologists. Following a break in the skin while handling fish, typical local inflammatory changes occur without constitutional symptoms. Having observed satisfactory results following roentgen therapy of other inflammatory conditions, it seemed reasonable to use such treatment when a patient with erysipeloid presented himself to us. Recovery ensued in less time than the minimum stated in the textbooks to be necessary for spontaneous cure. This case is reported to point out a method of therapy that may be timesaving, and to call attention to the fact that this disease may be contracted from handling fish caught in streams of this region.

### REPORT OF CASE

A white man, aged fifty, cut the palmar surface of his left middle finger on June 28, 1938, while cleaning a crappie caught at the Lake of the Ozarks. The wound healed normally. On July 6, redness and swelling began on the dorsum of the finger, soon spreading through the entire digit. He had no pain, but there was a burning sensation at times. When first seen by us on July 8, the finger was twice the size of its mate, so tense that it could not be flexed. The skin was a mottled violaceous color, with a slightly elevated scalloped margin where the lesion extended onto the dorsum of the hand. There was no enlargement or tenderness of the regional

lymph-nodes. His temperature and pulse were normal.

Roentgen therapy was instituted, 150 r units at 90 kv. filtered through 1 mm. of aluminum being administered to the area involved on July 8, 11, 13, and 16. The lesion did not progress after the first treatment. The purplish hue faded rapidly. By July 18, the swelling had diminished so that he could again flex his finger. He was able to return to his work as a cabinet maker on July 20.

## USE OF BARBITURATES IN SURGERY, II\*

Maurice A. Walker, M. D.,†

Glenn R. Peters, M. D.,

and

P. E. Hiebert, M. D.,

Kansas City, Kansas

In a previous paper, various uses of local infiltration anesthesia after oral administration of pentobarbital sodium were described.† This method has since been used satisfactorily in a wide variety of cases, particularly those for which ethyl chloride would have formerly been used. Recently a newer barbiturate, seconal (sodium propyl-methyl-carbinyl allyl barbiturate), has been used, which seems to cause narcosis even more promptly. For administration to young children the powder may be removed from the capsule and given in water or food. Mashed potatoes make a suitable vehicle. When an adequate dose is given procedures that are quite painful may be undertaken without any other anesthetic, as is illustrated by the following cases.

### Case 1

A girl, aged six, fell out of a tree, fracturing the right radius and ulna in their middle thirds. There was considerable angulation without displacement of the bones. When the girl was first seen a capsule of seconal, one and one-half grains, was given. About forty minutes later, after the exact nature of the injury had been established by roentgenograms, the angulation was corrected by manipulation without remonstrance from the patient.

### Case 2

A girl, aged five, fell on some concrete steps, cutting her head. Forty-five minutes after being given seconal, one and one-half grains, she was sleeping

\*From the University of Kansas School of Medicine.

†Walker, M. A.: Use of barbiturates in surgery. J. Kansas Med. Soc., 38:382 (Sept.) 1937.

\*From the University of Kansas School of Medicine.

(Continued on page 408)



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

The reaction to the special assessment has been very interesting and the response has been excellent.

At the Council Meeting held in Wichita, July 10, when the assessment was ordered, several of the Councilors at that time, and many members since they have received the bulletin, insisted the assessment should have been much more, giving the argument that their dues to various fraternities, civic clubs, etc., are much more than the dues to the State Society; although in the former they receive little in return except the social privileges and the pride of membership.

While on the other hand, the Society is striving at all times for the betterment of its membership, to protect its rights and privileges and to uphold the high standard of the medical profession.

I concur in their argument. It is true we have had a rather smug complacency, simply because our profession has been respected, but in these changing times, we are forced to realize that it is necessary for the entire membership to become interested, to assert itself, and insist that we maintain the position that medicine has made for itself and which it justly deserves.

N. E. Melencamp, M. D., President

---



---

## EDITORIAL

---



---

### SPECIAL ASSESSMENT

The Kansas Medical Society bulletin issued September 1 should be read by every member in the state. The bulletin explains that the Council, at its meeting on July 9, voted unanimously to request each member to pay a special assessment of ten dollars for the purpose of creating the necessary fund for the continuation of the work in hand. Our Society has achieved a preliminary victory in the decision of the Supreme Court of Kansas sustaining the provisions of the Medical Practice Act and judging it illegal for osteopaths to practice medicine and surgery. This fight has extended over a period of three years. If we are to continue to uphold the aims and ideals of organized medicine in protection of the public and maintaining leadership in matters of medical legislation, the rank and file of the profession must sustain the excellent work already accomplished by the Council and officers of the Society.

Every physician in the state feels a just pride in what has thus far been attained. Each member's personal interest in strengthening our organization will be felt by the Council as the contributions come in. Many physicians throughout the state have already paid their assessment. This hearty response is most gratifying.

The members of the Council have devoted a tremendous amount of time and energy to our legislative problems and they are determined to go forward. Let every man back up the Council with an early remittance. By our financial support now we may prepare for contingencies which we know must be met. Let us show our enthusiasm to carry on the fight.

---

### ACHLORHYDRIC HYPOCHROMIC ANEMIA OF MIDDLE AGED WOMEN

The low color anemias sometimes provide diagnostic and therapeutic difficulties. The achlorhydic hypochromic anemia has, until the past few years, escaped serious attention because they were all glibly

dismissed as "secondary" anemias. Knud Faber in 1913 observed the association of achlorhydria and "chronic chlorotic" anemia but only after the epochal discovery of the antianemic factors present in liver, and the knowledge that they did not respond to liver therapy, were they carefully investigated. Between 1929 and 1933, reports began to appear in the literature and Kaznelson, Reimann, and Weiner, Davis, Witts, Haden, Dameshek, and others made notable contributions to establishing this condition as a new clinical entity. They use various descriptive titles to emphasize the common features, which are the low color index and achlorhydria. Dameshek considers it a primary anemia and others agree on the similarity between this hypochromic anemia and the hyperchromic anemia known as pernicious anemia.

It occurs almost exclusively in women from thirty to fifty years of age, occasionally in younger or older females, and rarely if ever in males. The great variety of symptoms and signs may explain the lack of attention to the disease, however the usual presenting complaints are weakness and fatigue, palpitation, menorrhagia and other menstrual disturbances, and indigestion. Obviously these might fail to arouse much enthusiasm in the clinician on a busy afternoon. Other symptoms are dyspnea, diarrhea, sore tongue or mouth, anorexia, paresthesias, dysphagia, and the tendency to remissions and relapses. The spleen is not palpable and there may be found a glossitis with papillary atrophy similar to that seen in pernicious anemia. The nails are brittle and atrophic and are often concave or "spooned". There is a varying degree of pallor with blue scleras and without icterus. The dry inelastic hair is atrophied, wrinkled, and often there are excoriations at the corners of the mouth. Alterations in the reflexes and sensory changes may occur.

The hemoglobin of the blood is markedly reduced with only little or moderate decrease in the red cell count. The color index and the average cell volume as indicated by the volume index, are always quite low. Leukopenia is the rule. Stained blood smears show microcytosis, pallor of the red cells and often the banana shaped cells considered by Haden as a nearly constant finding. The icteric index is decreased. The bone marrow shows erythroblastic and



normoblastic hyperplasia. There is complete absence of hydrochloric acid in the gastric contents which is probably to be considered as an indicator of a missing principle necessary for blood formation, rather than as a direct cause of the anemia due to interference with the proper preparation and utilization of iron or other essential blood forming elements. Without achlorhydria the diagnosis of this syndrome should not be made.

Although the syndrome is usually primary, a similar clinical picture may be associated with intestinal parasites, myxedema, following gastro-enterostomy or other gastric surgery, in pregnancy, or with bleeding hemorrhoids. The possibility that blood loss from menorrhagia could contribute to the pathogenesis of the anemia seems improbable in view of the fact that the menses become normal after iron therapy.

The response to treatment is most gratifying. Iron is specific and there is a rapid rise in the hemoglobin and cell volume. The symptoms improve as the blood picture becomes normal. Liver and liver extracts are of no value whatever and Haden states that nearly every case he sees has had a long course of liver therapy at great expense but with no improvement. The achlorhydria is irreversible and it is generally agreed that hydrochloric acid should be administered if there are digestive tract disturbances. The dysphagia, which when associated with this type of anemia, has been called the Plummer-Vinson syndrome, often disappears with iron therapy. Treatment must be continuous, as in the Addison type, or relapse is certain to occur. The inorganic iron preparations are equally effective if given in adequate dosage. Bland's, ferrous sulphate, reduced iron, and iron ammonium citrate are preferable for the cost must be considered in the treatment of a deficiency disease which is to be continued for the remainder of the life of the individual. Haden emphasizes that the consideration of this syndrome as a clinical entity, as definite as pernicious anemia but occurring more frequently, will prevent much chronic invalidism in women between the ages of thirty and fifty years.

---

The best physician is most conscious of the limitations of his art.—Benjamin Jowett.

---

## CANCER CONTROL

---

### CARCINOMA OF THE LARGE INTESTINE

V. E. Chesky, M.D.

Halstead, Kansas

Carcinoma of the cecum, colon and sigmoid occurs more frequently than in any portion of the gastrointestinal tract, with the exception of the stomach. If we include cancer of the rectum as we do here, the number occurring in the stomach and the entire large bowel are approximately equal. Of the entire gastrointestinal tract less than one per cent occur in the small intestine.

About forty per cent of the carcinomas of the large bowel occur in the cecum, colon and sigmoid and about sixty per cent in the rectosigmoid and rectum. Exclusive of the latter the cecum and sigmoid are more frequently involved.

#### ETIOLOGY

The etiology as in cancer elsewhere is entirely speculative. There is plenty of evidence to prove that benign polyps do undergo malignant change. Polyps are not uncommon in the left half of the large intestine but they are rare in the cecum which is one of the common sites of malignant growth. We are certain that polyps do not always precede malignant growth.

#### AGE OF OCCURRENCE

Carcinoma of the large bowel may occur at any age. It is seen more frequently between the ages of forty and sixty but many are found between the ages of twenty and forty. The youngest seen in the Hertzler Clinic is a girl of seventeen years of age with a carcinoma of the transverse colon. We have seen a number ranging from twenty to thirty years of age and authentic cases have been reported from five to fifteen years of age.

#### SEX

In our cases, from 1916 to the present time, carcinoma of the large bowel has occurred more frequently in males than females in approximately the proportion of two to one. This coincides fairly well with the figures of the others.

#### PATHOLOGY

It is not the purpose of this paper to discuss pathology in detail. The types of carcinoma usually found are the fungating adenocarcinoma, the fibrosing or sclerotic type and the colloid or mucoid. The latter comprise only about five per cent of the

carcinomas found in the entire large bowel. The different types are responsible for the great variation of symptoms. The fungating type produce bulky lesions growing out from the lateral wall of the bowel and not tending to encircle the lumen. Because of this, the size of the lumen and the liquid nature of the bowel content obstruction occurs late if at all. This type is also commonly found in the rectum. They ulcerate, become infected, often produce a high degree of secondary anemia and may go on to perforation or abscess formation.

The sclerosing or fibrocarcinoma is more common in the left half of the large bowel. They tend to encircle the bowel. This together with the more solid nature of the bowel content has a tendency to produce early the symptoms of obstruction. They are largely fibrous, epithelial cells often being distributed in small irregular groups and short strands throughout this fibrous tissue. They do not invade the bowel longitudinally and grossly the intestine often has the appearance of a cord having been tied tightly around it.

The colloid or mucoid adenocarcinoma produces a large bulky tumor often spreading so widely that the site of the original growth cannot be located. They are more common in the cecum and rectum.

Eventually regardless of type ulceration and infection occur. When obstruction occurs there is dilatation and hypertrophy of the proximal portion of the uninvolved bowel.

Metastasis of carcinoma of the colon occurs late. The regional lymph nodes are usually involved first although liver metastasis has been noted and the regional lymph nodes free from invasion.

#### SYMPTOMS

It is impossible to give a definite chain of symptoms occurring in a certain order because of the difference in the anatomy and physiology of the right and left half of the large bowel, the difference of the contents and the difference in the type of pathology present.

The symptoms are usually insidious. Vague digestive disturbances, indefinite abdominal distress or pain, diarrhea or constipation of recent origin, alternating diarrhea and constipation or a marked secondary anemia of obscure origin should certainly make one suspicious of a probable malignancy of the large bowel. Obstruction, cachexia and marked weight loss are terminal symptoms and at this stage no treatment will likely be of any lasting benefit.

It will probably be less confusing to divide the symptoms into three groups, namely: those arising from lesions in the right half of the colon, those from lesions of the left half exclusive of the rectum and those of the rectum and rectosigmoid.

#### RIGHT HALF OF THE COLON

The patient may complain of bloating after meals not occurring with any degree of regularity as with cholecystitis. There may be pain and soreness in the right side of the abdomen. These are present most of the time and usually ascribed to a chronic appendicitis. There may be a marked anemia with some loss of weight and much loss of strength as the only symptom. The loss of strength is due to the marked anemia. A secondary anemia without obvious cause should always arouse the suspicion of carcinoma of the large bowel. Blood in the stool is present but only detected by chemical tests. Lastly the patient may discover a mass in the right side of the abdomen without having complained of any symptoms whatever.

#### LEFT HALF OF THE COLON

The symptoms of partial obstruction are much more common. Borborygmus and visible peristalsis are much more common, the latter of course seen only in lean individuals. The patient will often point to a certain spot on the abdominal wall where he says he can feel and hear the gas gurgling through the intestine; this being preceded by pain which is relieved when the gas passes this certain point. Increasing constipation finally terminating in complete obstruction is the rule. Intussusception, plugging with bowel content or inflammatory reaction are the final processes in the complete closure. Occasionally it is a barium meal unwisely given that brings this about. Pain is a symptom usually present but there is no regularity about its occurrence. Blood and mucus in the stool is always mentioned and in our experience have been absent oftener than present except that a positive chemical test for blood can usually be obtained. This does not apply to carcinoma of the rectum in which the blood is usually seen.

#### RECTUM AND RECTOSIGMOID

There is certainly no definite and clear-cut symptomatology of rectal carcinoma. Any of the symptoms may be produced by other rectal conditions. Bleeding, change of bowel habit and pain are the chief symptoms. Blood or blood and mucus are the symptoms most frequently mentioned. A progressive constipation or a diarrhea are frequently mentioned. When questioned closely one often finds the diarrhea to consist of frequent passage of blood streaked mucus. Pain is an extremely unreliable symptom. It is often just a dull ache in the rectum and often not mentioned at all. When severe it indicates that the cancer is of long standing and has grown into the surrounding tissue. Loss of weight so frequently mentioned is absolutely valueless as a diagnostic symptom. Often there is none and the patient has



the appearance of being in the best of health. If we are ever going to diagnose carcinoma of the large bowel at a time when something curative can be done it must be before cachexia and weight loss, which are really evidence of metastasis, have occurred. Deformed stools always mentioned are really rare unless the carcinoma is near or in the anal canal.

#### DIAGNOSIS

The chief requisite for the early diagnosis of carcinoma of the large bowel is to have the condition in mind and to try intelligently to eliminate it as a possibility when the patient presents himself because of abdominal or rectal symptoms. Early diagnosis is all-important in order to obtain a cure. It should be done before intestinal obstruction or marked physical deterioration occur. Any of the symptoms previously mentioned should make one suspicious and start him on the search. Tumors of the cecum, lower ascending, transverse, lower descending colon and upper sigmoid may frequently be felt by abdominal palpation except in the obese. Those of the hepatic and splenic flexures and lower sigmoid seldom can. Occasionally a sigmoid tumor in the culdesac may be palpated on rectal examination. The majority of rectal carcinomas may be diagnosed by a digital rectal examination. A proctoscopic and sigmoidoscopic examination should always be done and carcinoma once seen is very seldom confused with anything else. One may take a biopsy specimen but he should always remember that a positive biopsy is valuable but a negative one may only mean that the specimen was not taken from the right place. It cannot be too strongly emphasized that one should never attribute rectal bleeding to fissure or hemorrhoids without a careful examination digitally and with the proctoscope yet it is remarkable how often patients with rectal cancer have been operated on for hemorrhoids without even a digital examination having been made. Once suspicious of large bowel malignancy the diagnosis can be verified by x-ray examination after a barium enema. The x-ray is of not much value and not necessary in the diagnosis of cancer of the rectal ampulla but may be necessary for those of the recto-sigmoid. The irregular filling defect obtained with colonic cancer is so characteristic that there is little chance for error.

#### DIFFERENTIAL DIAGNOSIS

Carcinoma of the large intestine must be differentiated from tuberculosis, retrocecal appendicitis which develops slowly and forms a tumor, actinomycosis, diverticulitis, localized ulcerative colitis and regional ileitis.

Tuberculosis occasionally cannot be differentiated

until the abdomen is opened. The disease, if found in other organs, would help make the diagnosis. The filling defect in hyperplastic tuberculosis usually involves more of the bowel longitudinally and its filling defect is not nearly so irregular in its outline. The condition is usually found in the cecum and produces obstruction more frequently than carcinoma. Occasionally it involves the terminal ileum which carcinoma seldom does.

A slowly developing appendicitis with adhesions forming a palpable tumor must be differentiated. In this condition there may be no fever and very little leukocytosis to help differentiate. One important differential point is the absence of anemia in this condition while it is invariably present in carcinoma of the cecum. The barium enema will in most instances help make the diagnosis.

Actinomycosis usually occurs in the cecal region but the condition is much rarer than carcinoma in that region. It differs from carcinoma in that it usually runs a febrile course and is usually fixed to the anterior wall while carcinoma is fixed to the posterior or lateral. Actinomycosis also has a tendency to form abscesses elsewhere. Lastly sinus formation with the discharge of sulphur granules would clear the diagnosis.

Sigmoid diverticulitis often produces an x-ray picture that may be confused with that of carcinoma. It often produces blood in the stools also. The chief roentgenologic distinguishing point is the longer filling defect of diverticulitis as compared with carcinoma of the sigmoid. The former is also likely to run a febrile course.

A localized chronic ulcerative colitis may produce x-ray evidence suggestive of carcinoma. The filling defect however involves a longer segment of colon. The lumen of the filling defect is narrow at the mid-portion enlarging proximally and distally and the outline is wavy rather than grossly irregular.

Regional ileitis differs from carcinoma in that it has an acute onset with right lower abdominal pain, fever and often diarrhea. The abdominal wall over it will be more spastic than that over carcinoma and the localized tenderness more marked.

#### PROGNOSIS

The surgical treatment of carcinoma of the large bowel, the diagnosis being made early, justifies an extremely favorable prognosis in regard to the relief of symptoms, the prolongation of life and even to complete cures. Under the present methods of diagnosis sixty to seventy per cent are operable and the mortality rate in the hands of experienced surgeons runs as low as ten to fifteen per cent.

Metastasis to distant organs cannot always be ascertained before the abdomen is opened but even

then surgery for the relief of symptoms is often justifiable.

#### TREATMENT

The treatment is always surgical. The technic of the various surgical procedures will not be discussed in this paper. The type of operation depends on the location of the tumor, the presence or absence of distant metastasis and the general condition of the patient.

In carcinoma of the right half of the colon the right half may be removed and the ileum anastomosed to the transverse colon. If the patient is not a good risk this procedure may be done in two stages, the anastomosis of the ileum to the transverse colon being the first step.

Tumors of the left half of the colon may be resected and the segments anatomosed or the tumor may be exteriorized after the method of Mikulicz and the anastomosis of the segments made later. Either of these operations may be preceded by a cecostomy, the former always and the latter only when obstruction is severe.

Tumors of the rectum and rectosigmoid are disposed of in one of two ways. If the malignancy is in the ampulla of the rectum a perineal resection may be done and a perineal artificial anus created.

If the carcinoma is at the rectosigmoid an abdominoperineal resection either in one or two stages with the establishment of a permanent abdominal colostomy is done. The abdominal part of the operation is done first. The gut is resected above the tumor and the tumor freed of its peritoneal attachments. The colostomy is then established and the lower segment either removed perineally at this time or at a subsequent operation.

her with glasses which she wore until fourteen years of age. These glasses seemed to be some help. A third optometrist prescribed glasses at the age of fourteen. At the age of eighteen, an osteopath prescribed glasses for her. She has worn them until the present time, although she states that they did her no apparent good.

Examination: Vision O. D. 7/200, O. S. 20/30-2. The glasses worn were plus 1.00 combined with plus 0.50 axis 90, with 0.50 prism base in, both eyes. Glasses did not improve vision.

The patient was refracted under homatropine cycloplegia. On attempting to retinoscope her no shadow could be discerned in the right or left pupils. Ophthalmoscopic examination revealed O. D. anterior polar capsular cataract practically obliterating pupil, quite dense with irregular outline. The left eye exhibited the same condition but with much less dense appearing lens and with a cross outline leaving some of the pupillary area fairly clear. This cataract is also anterior polar capsular.

The esotropia is 40 degrees and there is no restriction of motility in either eye. Vision cannot be improved in the right eye. The left eye gives a vision of 20/30 with a plus 0.75 cylinder axis 150.

Diagnosis: According to Fuchs this is a clear cut case of congenital anterior polar cataracts, especially so since they are bilateral.

Comment: The tragedy is that a proper diagnosis was not made early. A discission or other operation might have helped her vision materially and avoided the esotropia and preserved the vision in both eyes. The cosmetic effect of strabismus, especially in a young girl sometimes becomes a major problem, to say nothing of the loss of vision. This case illustrates the necessity of eye examination by medical men rather than cultists.

---

---

## EYE, EAR, NOSE & THROAT

---

---

### CASE REPORT

W. T. Grove, M. D.

Liberal, Kansas

Miss L. B., age twenty-four, single, domestic and bookkeeper, was referred to our clinic for examination.

History: Eyes thought to be normal until she started to school at the age of six. At this time esotropia developed, the left eye fixing. An optometrist was consulted at six years of age who prescribed glasses without improving the esotropia.

At the age of eight, a traveling optometrist fitted

---

Crosley Radio Corporation, Cincinnati, has agreed to stop representing that Xervac, a device advertised as a therapeutic method for hair growth, will enable patients to regain normal, healthy hair, or that it constitutes a competent treatment for baldness or falling or lifeless hair.—Better Business Bulletin, August 4, 1938.

---



---

Jergens Lotion will no longer advertise as a preparation which keeps the hands young and prevents them from getting rough, or which restores natural oils or moisture to the hands. The advertising claims are based primarily on the theory that Jergens Lotion replaces moisture lost by the skin, according to the stipulation. According to reliable scientific authority, loss of moisture through the skin is a normal function and cannot be resupplied by a lotion.—Better Business Bulletin, August 4, 1938.



---

## TUBERCULOSIS CONTROL

---

### SOME FUNDAMENTALS IN TUBERCULOSIS PREVENTION

#### NON-SPECIFIC RESISTANCE

The importance of general resistance was well established before tuberculosis was known to be a germ disease; widespread tuberculosis was found associated with poverty; better living conditions provided some measure of protection.

Therefore in a community where the disease is endemic, and where the tuberculosis death rate is high, a good standard of living is excellent general treatment.

However, this has its limitations: It does not prevent infection. It gives inadequate protection to the non-resistant and cannot protect even the resistant against large and frequent doses of infection.

In areas where the death rate is low and infection no longer inevitable it is giving way to more direct measures aimed at the infectious nature of the disease.

#### SANITATION

The anti-tuberculosis program has since its inception stressed sanitary education and undoubtedly infection has been reduced as a result.

Nevertheless the protection conferred by sanitary habits is in a practical way also limited. It is acquired after long and intensive practice is maintained at the price of eternal vigilance and is subject to human error.

#### ELIMINATION OF INFECTION

Perhaps the greatest benefit conferred by the modern sanatorium movement is not the lowering of the death rate by cures but the lowering of the infection rate by segregation and isolation which has perhaps given us the key to the ultimate control and eradication of this disease.

Unlike the acute respiratory diseases which depend for their spread on many cases being infectious for a short period, tuberculosis is a more slowly developing infection and gives much more time to isolate it.

Isolation is now the most effective measure for the control of tuberculosis but in order for it to be effective there must be (1) ample bed accommodation, (2) the removal of financial barriers to treatment without flavor of charity, (3) the most efficient treatment procurable provided for

all, and (4) institutions sufficiently comfortable to be acceptable to patients for indefinite periods.

#### VACCINATION

Any assistance that could be secured from even a relatively successful prophylactic would be of great help and we should be open minded with regard to BCG.

#### EPIDEMIOLOGICAL STUDIES

As the death rate declines programs must become more selective, concentrating on those groups where infection is heaviest and which can only be determined by continuous epidemiological studies in the area under control. Such studies indicate the strength of the enemy, the location of concentration or weaknesses, and provide information for a plan of attack.

#### MORE CAREFUL SIFTING OF CONTACTS AND SUSPECTS

The clearing up of infection depends in many cases on the interest and energy of the family physician.

Where the incidence of infection is low and where the people are tuberculosis-conscious, the next step appears to be the supplying of free tuberculin to the family physician and his familiarization in its use as an aid in case selection.

#### UNIDENTIFIED SPREADERS

The greatest difficulty in clearing up tuberculosis is the infectious person with good tolerance who may spread the disease for years before falling sick. These persons appear to account for more than half the new patients admitted to sanatoria even where an advanced program is applied.

How to identify the near-well, chronic spreader, infectious, but not sick enough to report to a doctor, is the difficult problem in tuberculosis epidemiology.

One simple suggestion toward its solution is a more general use of sputum examination by the family physician.

It is not too much to expect that the family physician should take the responsibility of having the sputum of chronic coughers in his practice examined for tubercle bacilli.

There is perhaps no case-finding procedure a physician can follow which will yield higher returns for the same effort.

Sputum examination of chronic coughers would succeed in measurably reducing infection from now unidentified spreaders.

#### FOLLOW-UP OF EX-PATIENTS

No program is complete which does not give due consideration to the reexamination of all ex-

patients for an average period of four years after discharge. This reexamination is not only for the purpose of advising and assisting them to attain the greatest possible degree of recovery but is also for the purpose of picking out cases which become active and infectious and which require further treatment for recovery and segregation for prevention of infection.

#### CASE REGISTRATION

The greatest flaw in the armor of anti-tuberculosis work today is failure to accomplish adequate case registration in the absence of which systematic follow-up of either ex-patients or contacts is impossible.

Registration cannot be achieved by legislation alone and as a statistical effort alone will fail. It must, to be successful, include an active follow-up service which provides advice, examination and treatment if necessary for patients and their contacts.

#### TUBERCULOSIS-CONSCIOUSNESS

A fundamental of the anti-tuberculosis program upon which in the end all other tuberculosis activities depend is the tuberculosis-consciousness of the people.

The ailing individual must initiate the first step and come to the doctor.

When will he come? If he comes only on falling sick the great majority will come in an advanced stage of the disease; if on suspicion of early disease a large proportion will come in the early stage. How can he come on suspicion unless he has been taught to suspect tuberculosis?

While health officers, health nurses, family physicians, clergy, ex-patients, radio and press can accomplish a great deal, the responsibility could be shared with many thousands of fully trained teachers and "There appears no reason why health cannot be taught in school as successfully as can the three R's."

In a tuberculosis-minded community with modern facilities for diagnosis, tuberculosis can be diagnosed early enough and isolated early enough to reduce the spread of infection so rapidly as to convince us that it can be controlled and eventually reduced to a very minor cause of death.

*Some Fundamentals in Tuberculosis' Prevention, R. G. Ferguson, M.D. From the Canadian Public Health Journal, May, 1938.*

Tuberculin may be of value in the treatment of ocular tuberculosis. Used over a period of one year in 38 cases, lesions healed in 26 per cent; of 15 patients not treated with Tuberculin all were unhealed at the end of one year. Burton, E. W., *Virginia M. Monthly*, 64:499, 1937.

## NEWS NOTES

### SPECIAL MEETING

Information was received on August 26 that in compliance with the official request of the Board of Trustees, the House of Delegates of the American Medical Association would be called into special session in Chicago commencing on September 16.

The official call stated that the business of the session would be limited to the consideration of the National Health Program submitted to the National Health Conference recently held in Washington and to such other matters as might be submitted by the Board of Trustees.

Kansas representatives who attended are as follows: Dr. N. E. Melencamp, President; Dr. C. C. Nesselrode, President-elect; Dr. J. F. Hassig, Delegate; Dr. H. L. Snyder, Delegate; Dr. W. M. Mills, Editor of The Journal; and Clarence G. Munns, Executive Secretary.

A complete report of the meeting will be published in the next issue of the Journal.

### OSTEOPATHY

#### BULLETIN

The following order issued by the Kansas Supreme Court on September 14, was received by the Journal as it went to press:

#### ORDER

Defendant's motion for a rehearing is overruled.

Since plaintiff and defendant each has filed a motion for judgment on the pleadings, these motions are set for hearing in open court on oral arguments and briefs, on October 4, 1938, following cases now on the docket for that day. We invite counsel to suggest the form of the decree which might properly be entered, in view of the court's opinion heretofore rendered in this cause, and, if possible, to agree upon an appropriate decree in harmony with the opinion of the court, and which they deem fair to the parties.

Defendant also has filed a motion for the appointment of a commissioner. There will be no necessity of considering this motion if an appropriate decree on the pleadings can be made. If counsel desire to press this motion it will be heard following the argument on the motions for judgment. If a commissioner is appointed, the court would like the views of counsel as to the matters to be inquired into by the commissioner, and the scope of the evidence to be taken before him.

The following is a report of the present status of litigation pertaining to the practice of medicine and surgery by osteopaths.

On June 11 the Kansas Supreme Court handed down a unanimous opinion in the case of State vs. Gleason stating that an osteopathic license in Kansas does not confer upon its holder the right to practice drug therapy and operative surgery. This opinion followed an agreed upon motion wherein the Kansas Supreme Court was asked to determine the law governing osteopathic practice in Kansas in advance of any hearing, finding or motion



applicable to the practice in which Gleason is engaged.

Following the issuance of the opinion, the attorneys for Gleason, filed a motion for rehearing and a motion for appointment of a commissioner. The motion for rehearing stated that Gleason believed the opinion is in error and that the case, therefore, should be reheard. The motion for a commissioner embodied a request that the Court appoint a special commissioner to hear testimony about the nature of Gleason's practice and also about the teachings in osteopathic schools from 1901 to 1913. The Society's reply to both of these motions is contained in the briefs printed below which were filed with the Court on September 12.

In addition to the above briefs filed by the Society, Mr. Theo. F. Varner, Assistant Attorney General, has also filed two briefs in opposition to these motions and a motion for judgment on the pleadings. The latter motion has the effect of stating that the law is definitely settled in the case; that Gleason has admitted practicing medicine and surgery in his pleadings, and that, therefore, nothing remains in the case except an order ousting the defendant from the future practices of medicine and surgery.

Since the Kansas Supreme Court does not hold a term of Court during July and August, no action could occur on either of defendant's motions until the September term. If the motion for rehearing is honored, it would be necessary for the case to be rebriefed and repleaded. If the commissioner motion is approved on both grounds requested by the defendant, it would be necessary for the Court to obtain testimony as to Gleason's medical and surgical practices and it would also be necessary for the commissioner to prepare a record showing the nature of osteopathic teachings in 1901 and 1913. If both motions are overruled, the case will be entirely complete and in that event it is probable the Court would issue an order prohibiting Gleason from further medical and surgical practice.

Another fact of interest on this subject is the several cases which have been heard on the right of Kansas osteopaths to obtain narcotic permits. After the Kansas Supreme Court had handed down its opinion, Judge Richard L. Hopkins, of the United States District Court, refused to continue longer the temporary restraining order under which Kansas osteopaths obtained their 1937 narcotic privileges. Judge Hopkins also refused a permanent injunction in this regard. Following this action, the osteopaths appealed to the United States Circuit of Appeals which court heard the appeal in Denver during the first part of August and which also refused to grant them a temporary order or an injunction. This, therefore, means that the original finding of the Federal Narcotic Division now has full force and effect and that Kansas osteopaths are not able to secure permits or prescription books. Approximately one hundred osteopaths secured their 1938 permits in advance of June 30 and in advance of completion of the first litigation on this subject in Judge Hopkin's Court. It is probable these permits will be cancelled in the event that action can be legally accomplished. The osteopaths who hold these permits are, however, in a precarious position. A federal permit enables a physician to purchase narcotics but it does not authorize him to use the quantities purchased unless such is permissible under his state law. The fact that the Kansas Supreme Court has ruled that this is not legal, subjects osteopaths to a likely possibility of violating both federal and state law.

The Society briefs mentioned above which were prepared by Faulconer, Dale and Swarts, Arkansas City;

Harlan and Johnston, Manhattan; and Harry Fisher, Fort Scott, are as follows:

# I.

## REPLY OF THE KANSAS MEDICAL SOCIETY, AMICUS CURIAE, TO DEFENDANT'S PETITION FOR A REHEARING

In this case the plaintiff, the defendant, and the Amicus curiae filed an original and a reply brief. These briefs were voluminous and, within the limitations of counsel, fully presented every question which the Court was called upon to decide. The opinion rendered June 11, 1938 on the questions of law propounded by the defendant shows, beyond the peradventure of a doubt, that every point raised by the interested parties was thoroughly considered. We have carefully studied the defendant's petition for a re-hearing and we fail to find a single new argument advanced, and the additional cases cited are merely cumulative.

The defendant complains because the Court reached certain conclusions which do not coincide with his view of the law, but it is nevertheless true that he did not point out a single instance in which the opinion tends to show that the Court misconceived or overlooked any of the issues that were presented.

# II.

## THE PROSPECTIVE CHARACTER OF THE STATUTE

The defendant generally misconceives the fundamental principle upon which the opinion in this case is grounded; namely: that the Legislature and courts of this state have recognized a distinct difference between the "practice of medicine and surgery" and the "practice of osteopathy".

Whether the defendant ignores this basic and fundamental distinction for the purpose of confusion and argument is unknown, but such distinction is clearly and repeatedly enunciated throughout the opinion in this case.

Keeping this distinction in mind clarifies most of the questions propounded and argued by defendant in his petition for rehearing.

The defendant complains that this court has answered Question No. 1 both affirmatively and negatively. The court's answer to this question warrants no such claim. The court simply construes the 1913 statute as requiring a certificate to practice osteopathy to be obtained from the state board authorized to issue same, and, after such certificate is obtained, the holder thereof must practice "osteopathy" in harmony with its fundamental principles or what is sometimes spoken of as the science or system of osteopathy as generally known and understood and as taught in osteopathic schools or colleges of good repute in 1901 and 1913.

The court recognizes that the osteopath, in common with all scientific and professional men, is expected to make progress and apply and adopt all new and approved methods in harmony with his system of healing, but he cannot expect to change the basic and fundamental therapeutic concepts of his profession. In answer to Question No. 1 this court simply and correctly states an indisputable conclusion that a certificate authorizing a person to practice osteopathy in Kansas, issued by the proper board, has never been recognized by our statutes nor by our court as authorizing its holder to engage in the "practice of medicine and surgery" in Kansas.

In his petition for re-hearing the defendant once again presents certain excerpts from the charter of a particular osteopathic school. These articles of incorporation quoted indicate that in 1894 this college might have been authorized to teach both medicine and surgery and in addition osteopathy in all its branches, (and the wording

of this charter indicates the school recognizes a basic distinction between "medicine and surgery" and "osteopathy" as this court holds) but even this would not be controlling. Regardless of what the school was authorized to teach or what was actually taught, the question is for what did this defendant qualify?

Many schools are authorized to and do teach law, pharmacy, engineering, medicine and surgery, dentistry and many other professions, but the fact that they are permitted to so teach does not permit the student to pursue any profession taught at the school. A graduate of such a school is not permitted to follow any of these except such as he studied and is licensed to practice.

The defendant cites *Hazelton v. Stage Lines* (N. H.) 133 Atl. 451, 47 A.L.R. 223; *State v. Trust Co.*, 99 Kans. 841, and *Bailey v. Baldwin City*, 119 Kans. 841. An examination of these cases discloses them to be merely cumulative to others previously cited by defendant. The principle enunciated in each of the cases was heretofore submitted to this court, considered by it and recognized in the opinion in this case.

The right claimed by the defendant, under his interpretation of the rule announced in the three cases just above cited, was definitely established by this court. The defendant is required to practice osteopathy in harmony with the fundamental principles of osteopathy as generally known and understood in 1901 and 1913, but he is permitted and expected to continue to study, to make progress, to learn more about his profession and apply such knowledge to his practice of his profession. He is expected to adopt all betterments and new technique, but he must stay within the fundamental theories and precepts of osteopathy as known and understood when the statutes of 1901 and 1913 were enacted. In arriving at this conclusion the court very properly adopted the common sense view taken by the legislature in 1913, when it recognized a clear distinction between the practice of medicine and surgery and osteopathy by providing separate boards for each profession.

The defendant states in his petition for re-hearing (page 5) that this court calls attention to the fact that a certificate to practice osteopathy never has been recognized by our statutes and by our courts as authorizing its holder to engage in the practice of "medicine and surgery" in this state and then calls this court's attention to twenty-three cases, as a few among a multitude, holding "that the practice of osteopathy is the practice of medicine".

A review of these cases shows that with two exceptions they were decided between 1900 and 1911, and each of them construed particular statutes of individual states. Each was a criminal prosecution, and most of them did not involve osteopathy.

In all these cases, except *State v. Collins* and *People ex rel v. Siman*, a practitioner of some phase of the healing art was being prosecuted for or was urging his right to practice his particular science without a license. The cases involved a practitioner of "suggestive therapeutics", "chiropractic", sale of a preparation called "Scheussler's Tissue-Food", a practitioner of "eyelet dilation", a "magnetic healer", a "magnetic healer and manipulator", a "master mechanic of the human body", an "ophthalmologist", a "Doctor of Vital Science", a Christian Scientist, a self-styled "Professor" and "Magnetic Healer", a "Vitalizer, Electric or Ray Baths and Stomach Wash". The practitioners were attempting to cure and relieve human ills and suffering by their various therapies and in most instances they did not have a license to practice any phase of the healing art in the state where they attempted to

operate.

These cases were decided at a time when the various states had statutes similar to the law existing in Kansas prior to 1901 or, in other words, when the only law governing the practice of the healing art was that generally included in the Medical Practice Act.

The opinions in these various cases hold that under the facts disclosed the accused is violating the provisions of the various state statutes by practicing some phase of the healing art without the certificate required by law.

Cases have been considered by this court where the facts have been similar to those involved in the authorities cited by defendant and where the position taken by this court is in harmony with the view of courts from these other states. We refer to *Underwood v. Scott* (1890) 43 Kans. 714, *State v. Wilson* (1900), 61 Kans. 791, *State v. Huff* (1907), 75 Kans. 585, and even the late case of *Slocum et al v. City of Fredonia* (1932), 134 Kans. 853, which can easily be reconciled with the cases cited by defendant.

In *State v. Johnson*, 84 Kans. 411 this court cites six of the cases relied upon by defendant as authorities and decided the case in harmony with these cases. In the body of the opinion (page 420) appears this apt passage:

"The legislature has, by the statutes referred to, treated osteopathy as a separate department, and covered all other branches of the healing art by the term medicine and surgery. As new schools of practice come into favor their followers must possess the requirements for the practice of medicine and surgery, or prevail upon the legislature to make separate provision for them as it has done for the osteopath."

We agree with defendant that there is no "magic" in the word "surgery", but "surgery", as shown, viewed, and exhorted by the osteopath, the osteopathic colleges, writers and commentators at the time in question, was a well-defined "manipulative surgery" as distinguished from "operative surgery" or "surgical operations".

A reference to the excerpts contained in the original brief of this amicus curiae will disclose that the osteopath was told by his profession to attend a medical school if he desired the proper work and experience in operative surgery; the work of the surgeon was also described; it was prophesied that the surgeon's knife would be beaten into a pruning fork, that the steel of his needle would be used by the bride for making her trousseau, and that his scissors would be in the house-wife's hands. The use of the surgeon's knife was condemned, the use of drugs was likened unto poisons, and most every activity of the medical man, as generally known and understood, was condemned in no uncertain terms. Surely there can be no dispute relative to these conclusions.

The defendant says there is no "magic" in the word "surgery", but in the next breath attempts to attach some exaggerated construction or meaning to the term "surgical operations". The term "surgical operation" is so well understood, its meaning so clear and so universally used that this court might properly take judicial notice of its correct interpretation, as other courts have done. (See *Akridge v. Noble*, 114 Ga. 949, 41 S. E. 78; *Harris v. Fall*, 177 Fed. 79, 27 L.R.A. (N.W.) 1174, and *Funk v. Bonham* (Ind.) 151 N. E. 22).

### III.

#### PROPER JUDICIAL CONSTRUCTION OF WORDS USED IN STATUTE

We do not consider the construction given to Question 2 as holding that the course of study laid down in the



statute is "simply a list of vision-wideners and knowledge-fillers" as defendant suggests. This court correctly says, "This is simply a list of subjects in which an applicant for a certificate to practice osteopathy is required to take an examination. An osteopathic school or college of good repute is required to teach these subjects." However, it must be borne in mind that, irrespective of the subjects taught or the examinations taken, the applicant applies for and, if successful in his examination, receives a certificate "to practice osteopathy" and nothing else.

The defendant should not point an accusing finger at this court for his present predicament. For twenty-five years the present statute has remained unchanged on our statute books. It was construed by this court in *State ex rel v. Eustace*, in 1923, or more than fifteen years ago. This court cannot legislate. It can only construe such legislation as is passed, and this it has correctly done.

The defendant a second time calls to the court's attention and lays great emphasis upon the *Minnesota* case of *Stoike v. Weseman*, 167 Minn. 260, 208 N. W. 993. There is no reason to believe that the court did not consider this case before this opinion was written. Let us see what was in issue. The *Minnesota* court stated it as:

"The question to be determined is whether our statutes permit a licensed osteopath to attend a woman in childbirth".

and the court holds that an osteopath is permitted so to do.

We have no quarrel with such a holding, and the case does not add or detract anything from the issues here involved. It is an authority for nothing so far as the case at bar is concerned.

We concede that a licensed osteopath in Kansas may practice obstetrics, but he is limited to such practice in accordance with the tenets and technique of the osteopathic profession, as distinguished from the medical profession. This distinction is made quite clear in a case formally cited and stressed by the defendant. We refer to the case of *People ex rel v. Heckard* (1927), 244 Ill. App. 112, 118, wherein it is said:

"It appears from this record, as an uncontradicted fact, that obstetrics is a branch of osteopathy, recognized and taught as such by osteopathic colleges, and practiced as such by osteopathic physicians in the same manner and by the same means, except as to the use of drugs and operative surgery, as it is taught in the medical schools and practiced by medical doctors."

Here is judicial recognition of the osteopathic theory and technique of obstetrics as opposed to that of the medical schools and the practice of medical doctors.

Throughout the petition there is a deliberate attempt of defendant to quibble over the use of words or phrases, and it is apparent that he has completely overlooked the suggestion and admonition of this court that

"Professional men of high standing seldom have serious difficulty with such details." (p. 13).

and pays no attention to the sensible, correct and legally sustained manner in which this court met the same quibbling in its opinion when it said:

"Osteopaths, in common with all scientific and professional men, are expected to continue to study, to make progress, to learn more about their profession, and to apply such knowledge in their practice, but they are still engaged in the practice of osteopathy, as that science or system was known and understood when our statutes above mentioned were enacted. They are not authorized to practice optometry (*State ex rel v. Eustace*, 117 Kans. 746, 233 Pac. 109), or any of the other professions which require a specific certificate of authority. If, as suggested by

counsel for defendant, osteopathy has abandoned its fundamental opposition to drug therapy and operative surgery (meaning by this term surgery by the use of surgical instruments), and now includes the use of those things in its system, that fact has never been recognized by the legislature of this state. Our statutes continue to recognize the "practice of osteopathy" and the "practice of medicine and surgery" as separate and distinct things. A certificate authorizing one to practice osteopathy, whether issued prior to 1913 by the Board of Medical Registration and Examination, or since that time by the Board of Osteopathic Registration and Examination, never has been recognized by our statutes, nor by our courts, as authorizing its holder to engage in the "practice of medicine and surgery" in this state." (p. 9-10).

The above excerpt from the written opinion in this case clearly, completely and unequivocally answers every pertinent claim and argument advanced by defendant in his petition for a re-hearing. Not only is this true, but the position of this court taken, and so well expressed, is in entire harmony and accord with all recognized formulas of statutory construction, the application of sound judicial principles, and with a multitude of cases cited by the state and this amicus curiae in their original briefs, and, last but not least, with the solemn declarations and pronouncements of the osteopathic profession, its schools, lecturers, publications, and even its founder—Dr. Still. All these are presented in our original brief and need not again be set out.

Under this subdivision and in other places in his petition for re-hearing the defendant complains because the court did not adopt his version of what the legislature intended by its failure to include in the 1913 act the phrase "But they (osteopaths) shall not administer drugs or medicine of any kind nor perform operations in surgery". This matter was fully argued by the defendant in his original and reply briefs and nothing new is presented in his petition for re-hearing except a recital of the legislative history of the 1913 act. This history proves nothing more than that the quoted phrase was intentionally left out of the 1913 law, which fact was recognized and conceded by the court when it said in the opinion:

"It seems clear the legislature intentionally omitted the prohibitory phrases contained in the 1901 act from the act of 1913 (Ch. 290) but it does not follow that thereby the legislature intended to confer unrestricted authority on osteopaths to administer drugs and perform operations in surgery."

The court considered that the prohibitory phrase was an "inaccurately used expression" and should have been omitted for that reason alone. Judging from the language appearing in the petition for re-hearing it would seem that defendant does not give whole hearted approval to this conclusion. He would have the court say that when the 1913 legislature took the negative action of denying Senator Huffman's amendment it thereby conferred positive practice rights on the Kansas osteopaths—in other words that a failure to prohibit them from using drugs and performing operations in surgery amounted to a positive declaration of their right to do so. Defendant suggests no reason why the legislature was precluded from writing into the act such a positive declaration enlarging osteopathic practice rights and yet he complains because this court declined to find, in accordance with his contention, a legislative intent which had not been fairly—or even inferentially expressed.

It may be that Senator Huffman, a physician and member of the Senate in 1913, attempted out of an abundance of

## Are the Neuritic Symptoms of Pregnancy *due to a deficiency* *of vitamins B<sub>1</sub> and G?*

**S**UCH common neuritic symptoms of pregnancy as pains in arms and legs, muscle weakness, and (less frequent but more serious) paralysis of the extremities may result from a shortage of antineuritic vitamins, recent investigations appear to show. Although neuronitis of pregnancy has long been considered a toxemia, no toxins have ever been identified.

Clinical observations of Strauss and McDonald lead to the conclusion that the condition is a dietary deficiency disorder similar to beriberi, caused by lack of vitamin B<sub>1</sub>, complicated by symptoms which may be traced to shortage of vitamin G. They report recovery in their cases receiving this therapy, including dried brewers' yeast.

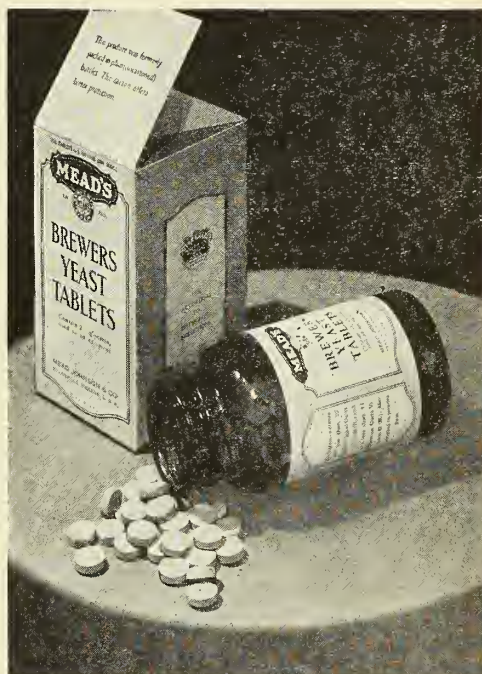
### ***Hyperemesis as Cause of Avitaminosis***

Wechsler observes that all cases of polyneuritis of pregnancy recorded in the literature were preceded by long periods of severe vomiting. "It would seem," he adds, "that because of actual starvation these patients suffered from avitaminosis and consequent neuritis," a view likewise held by Hirst, Luikart, and Gustafson. Plass and Mengert observe that the practice of giving high carbohydrate feedings for hyperemesis gravidarum is still more likely to cause avitaminoses B and G.

Dried brewers' yeast, as it is far richer than any other food in vitamins B<sub>1</sub> and G, is being used with benefit both in the prevention and treatment of polyneuritic symptoms of pregnancy. Lewy found that additions of yeast to the diet reduced electric irritability of the peripheral nerves and brought clinical improvement. Vorhaus states that he and his associates, after administering large amounts of vitamin B<sub>1</sub> to 250 patients having various types of neuritis, including that of pregnancy, observed in about 90% of cases "varying degrees of improvement, i.e., from partial relief of pain to complete disappearance of all symptoms."

### ***Need for Vitamins B and G in Lactation***

Evans and Burr, Hartwell, Sure and co-workers, and Macy *et al* are among numerous authorities who find that the nursing mother also needs supplements of vitamins B<sub>1</sub> and G, from 3 to 5 times the normal requirement. Tarr and McNeile report that the physical, mental, and emotional status of 120 pregnant and lactating women receiving Mead's Brewers Yeast and other foods high in vitamin B was superior to that of a control group of 116 women.



Since the management of polyneuritis of pregnancy is difficult at best, it would appear logical to supply those dietary substances which may safeguard against it. One of the richest and most convenient sources of the anti-neuritic factors, vitamins B<sub>1</sub> and G, is Mead's Brewers Yeast Tablets. Consisting of nonviable yeast, they offer not less than 25 International vitamin B<sub>1</sub> units and 42 Sherman vitamin G units per gram.

Supplied in bottles of 250 and 1000 tablets, also in 6-oz. bottles of powder

*Please enclose professional card when requesting samples of Mead Johnson products to cooperate in preventing their reaching unauthorized persons.*  
Mead Johnson & Company, Evansville, Indiana, U. S. A.



caution to retain in the present act the wording of the 1901 act, and if such be the case it is quite apparent that he was endowed with a wisdom and foresight which enabled him to foresee that the osteopath in the future would attempt to abandon the fundamental tenets and theories of his practice and usurp those of the medical profession.

As was so well said by this court, in 1913 the fundamental principles of osteopathy or the science or system of osteopathy were well and generally known and understood and were as taught in osteopathic schools and colleges at that time. The bare record of the Senate indicates that that body intentionally refuse to include in the act a restriction similar to that contained in 1901 relative to the use of drugs and the doing of surgery, but the record is silent as to the cause and this court very reasonably assumed that it was rejected because the then scope and claim of osteopathy were well known. It can hardly be said that the manner in which the osteopath condemned drugs and surgery at that time was not known to the public generally and the legislature, and it is absurd to argue, that simply because this one amendment failed, it is clear that the legislature intended to give the osteopath the specific right to administer drugs and medicine and to perform operations in surgery. Such an argument utterly ignores the fact that the 1913 legislature set up separate boards for the regulation of these two professions thus plainly indicating a fixed purpose on the part of the legislature to confine each to its particular field. Having done this, it is not to be presumed that the legislature was attempting to confer any additional practice rights on osteopaths by permitting them to use drugs and perform surgical operations, for to have done so would have nullified its work and resulted in endless confusion.

Surely the court was correct in saying that the prohibition contained in the 1901 act was an inaccurately used expression and should have been omitted, because there was no reason to prohibit the doing of something by the osteopath which he so bitterly denounced and did not profess to do. This reasoning of the court is sound and in our judgment cannot be improved upon.

Apparently the defendant does not disagree with the court's answer to question number three but under this heading of his petition for re-hearing he continues to argue that the court should have held that the omission by the legislature to include in the 1913 law the prohibition phrase of the 1901 act signified a legislative intent to confer unlimited practice rights on osteopaths. He attempts to supplement this argument by an unfounded complaint that the court erroneously took judicial notice of what was taught in the osteopathic college in 1901 and 1913 and that *materia medica* was not a part of their courses of study. While we feel that such an argument has no relevancy to the motion for re-hearing, we, nevertheless, are constrained to give the matter some attention. We are amazed to find the defendant contending that *materia medica* was taught in the osteopathic colleges in 1913 and we can hardly believe that the defendant is serious when he says that the court indulged in making "erroneous presumptions of fact." Surely he does not doubt the authenticity of the solemn pronouncement of the committee on schools of the American Osteopathic Association, adopted unanimously by the House of Delegates of the American Osteopathic Association at its annual meeting in 1913 appearing on page 13 of our original brief, and which for the convenience of the court, we again quote:

"(a) They shall preserve undefiled the osteopathic principle of the prevention cause and cure of disease.

(b) They shall maintain an invariable stand against

the teaching and practice of drug therapeutics. (d) Engaging in the teaching of drug therapeutics by any member of this association shall be cause for depriving a membership; and, the participation of such teaching by any college shall be cause for refusal by the association of recognition of such college as a co-operating organization."

If defendant will turn to 65-1202 G.S., 1935 he will find a definition of "osteopathic school or college of good repute" which among other things provides that such a college or school must have requirements "which shall be in no particular less than those prescribed by the American Osteopathic Association."

Would the defendant have us believe that the osteopathic colleges of good repute paid no attention to the speeches, lectures and writings of the leaders of his profession including the founder, Dr. Still; the official actions and publications of the governing body, The American Osteopathic Association, and, even at the risk of losing membership in and recognition by the American Osteopathic Association, went right ahead teaching *materia medica* as a part of osteopathy? If defendant's contention is true then, may we inquire just how it happened that Words and Phrases, Webster's New International Dictionary, and the Kansas Supreme Court in *State v. Johnson*, 84 Kans. 411, and in *State vs. Eustace*, 117 Kans. 746, failed to discover the fact and mistakenly denominated osteopathy as a system or drugless healing covering the period from 1911 to 1925? Of course the answer is that defendant is wrong and this court was right when it said in its opinion "what was taught in them (osteopathic colleges) was a matter of common knowledge." Of this, the court properly took cognizance.

It is not to be presumed that what was taught and practiced as osteopathy in reputable osteopathic colleges in 1901 and 1913 was anything different than what osteopathy was universally known and understood to be. The court had excellent precedent for taking cognizance of the broad therapeutic concept of osteopathy because the court did just that in *State vs. Johnson*, supra., and *State vs. Eustace*, supra., many years ago.

We have tried to give consideration to all of the points raised by the defendant and we are thoroughly convinced that his petition for a re-hearing raises no new issue, discloses no error on the part of this court, is utterly devoid of merit, and that it should be denied.

#### BRIEF OF THE KANSAS MEDICAL SOCIETY, AMICUS CURIAE, IN OPPOSITION TO DEFENDANT'S MOTION FOR THE APPOINTMENT OF A COMMISSIONER

Defendant's motion for the appointment of a commissioner does not indicate what questions of fact are in this case upon which, he thinks, testimony should be taken. On page 10 of his petition for a re-hearing, defendant says:

" . . . a very substantial controversy exists as to what was taught and practiced in legally incorporated colleges of osteopathy of good repute in the years 1901 to 1913 and defendant will seek to demonstrate what the course of study was in those colleges by competent and convincing testimony."

From this, we conclude that defendant is of the opinion that what osteopathy was in 1901 to 1913 is still an open question, and that this court should appoint a commissioner to hear evidence upon the subject.

It also seems probable that defendant will insist that a commissioner be appointed to determine whether the

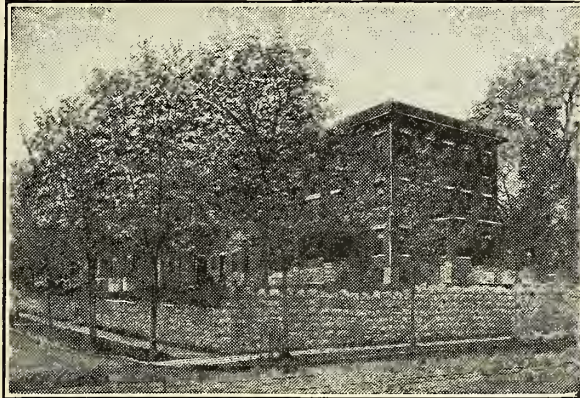
# THE MAJOR CLINIC

3100 Euclid Avenue, Kansas City, Missouri

HERMON S. MAJOR, M. D.  
Medical Director

HENRY S. MILLETT, M. D.  
Associate Medical Director

Electricity  
Heat  
Water  
Light  
Exercise  
Massage  
Rest  
Diet  
Medicine



Nervous  
Diseases  
Selected  
Mental  
Cases.  
Alcohol  
Drug and  
Tobacco  
Addictions

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.

# RADIUM

## —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

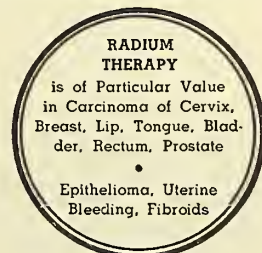
The complete service for Radium users

For details, address

## RADIUM AND RADON CORPORATION

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO





defendant was, as a matter of fact, engaged in the practice of medicine and surgery prior to the filing of the present action. If there are reasons, other than those above enumerated, that prompted the defendant to apply for the appointment of a commissioner, they are unknown to us. We shall discuss these two propositions in the order stated.

#### WHAT THE SYSTEM OF OSTEOPATHY WAS IN 1901 TO 1913 IS NO LONGER AN OPEN QUESTION

The defendant invoked the statutory power of this court to hear and determine questions of law in advance of the trial. In his brief in support of that motion, he said:

"A state of confusion and unrest, as well as a state of hostility, exists in the healing arts in Kansas, and early and speedy action is desirable. Defendant contends that a decision on the question of law involved, at this state of the proceedings, will result in the final determination of the case."

Following this, he submitted to the court the list of questions, the answers to which he said would result in the final determination of the case. The court answered the questions propounded and, if the defendant fully believed the statement, above quoted, surely he has no ground to complain if the court's answers to the interrogations make the appointment of a commissioner unnecessary and now compel a judgment against him. The controlling law of this case is clear cut, definite and conclusive.

In the final analysis, the crux of this law suit was summed up and definitely determined by the court in its answers to question Number 8, when it said, in effect, that osteopathic physicians, under the provisions of the osteopathic act, are not licensed to administer drugs and narcotics as remedial aids nor to extend their system of osteopathic surgery into the general field of operative surgery with surgical instruments. That was the plaintiff's contention from the beginning and it was for the purpose of securing a judicial determination of that question that this litigation was instituted. Every other interrogatory propounded was but a stepping stone to the solution of this main question.

Now, with a final pronouncement of the law that osteopaths are not privileged to practice medicine in the sense of drug therapy or perform operative surgery with surgical instruments, what function is there for a commissioner to perform? And, may we ask, what evidence could the defendant produce that would or could disturb this conclusion of law?

Based upon the statements appearing in defendant's petition for a re-hearing, he apparently feels that the court mistakenly decided that in 1901 to 1913,

"Broadly speaking, theirs was a drugless system of healing . . . The general use of a knife or other instruments in surgical operations was regarded as unnecessary and opposed to the osteopathic system of treatment,"

and that the court should now permit the defendant to offer evidence to prove that such a definition of the broad fundamental principles of the system of osteopathy is incorrect. His contention seems to be that the court, in arriving at the above definition, improperly took cognizance of what the science of osteopathy was in 1901 to 1913, and that the only way in which the court could judicially define it was to wait until the evidence disclosed what was taught in the osteopathic colleges from 1901 to 1913. We cannot give assent to this doctrine for several reasons. In the first place, the defendant, when he framed question Number 8, wanted a judicial construction

of our osteopathic statute and a determination of the one broad, ultimate question upon which this case would turn. In other words, he wanted the court to decide, in answer to that question, whether he could or could not practice medicine and operative surgery under his osteopathic license. Defendant must have known that the answer to this question hinged upon the conclusions reached on two preliminary propositions.

He knew that if the court decided in answer to question one, that osteopaths were confined to the practice of the broad fundamental principles of the system of osteopathy as they existed from 1901 to 1913, it would then be necessary for the court to define judicially the term "osteopathy" as it was then known to the legislature and the courts in order to give a correct answer to question 8. It is our settled conviction that what the system of osteopathy was in 1901 to 1913 was never a fact question in this case at all because this court had in *State vs. Johnson*, *infra*, and *State vs. Eustace*, *infra*, judicially defined the term, which definition, over a period of twenty-seven years, has become so imbedded in the jurisprudence of this state that it is no longer open to question. When the court, in the present case, adopted substantially the same definition of osteopathy as was adopted in the *Johnson* and *Eustace* cases, it simply applied the well known doctrine of *stare decisis*. Nevertheless, all parties sought to aid the court in arriving at a correct definition of the term "osteopathy" by citing judicial definitions as well as definitions taken from standard dictionaries and encyclopedias.

Defendant's contribution consisted principally of two modern definitions of osteopathy, one from *Stedman's Medical Dictionary* and one from *Dorland's American Illustrated Medical Dictionary*. Not a single judicial definition, old or modern, of the term "osteopathy" was submitted in either of the briefs filed by defendant. We do not attribute this to any lack of diligence on the part of defendant's counsel, but rather to the fact that it was a physical impossibility for defendant to glean from the decisions of the courts, the standard dictionaries, legal or otherwise, an authoritative definition of osteopathy that, from 1901 to 1913 (and even many years later) denominated the science as anything other than a manipulative, drugless system of healing. On the other hand, the plaintiff and amicus curiae cited in their brief references to and definitions of osteopathy from *State vs. Johnson* 84 Kan. 41; *State vs. Eustace* 117 Kan. 746; *State vs. Sawyer* 36 Idaho 814; *In re Rust* 181 Cal. 72; *Bragg vs. State* 134 Ala. 165; *State vs. Stoddard* (Iowa) 245 N. W. 273; *State vs. Hopkins* 54 Mont. 52; *Harlan vs. Anderson* 55 Cal. App. 263; *State vs. Bonham* 93 Wash. 489; as well as definitions of that system of healing from *The New Standard Dictionary of the English Language*; *Webster's New International Dictionary*; *Funk and Wagnall's New Standard Dictionary of the English Language*; *Century Dictionary and Cyclopedia*; *6 Words and Phrases* 5070 and *3 Words and Phrases, New Series*, 803. All of these authorities show conclusively that this court was eminently correct when it reached the conclusion that from 1901 to 1913 osteopathy was a drugless system of healing and that the use of the knife was no part of that system. That the court had the undoubted right to rely on these authoritative sources of information in framing its definition of osteopathy, is beyond dispute.

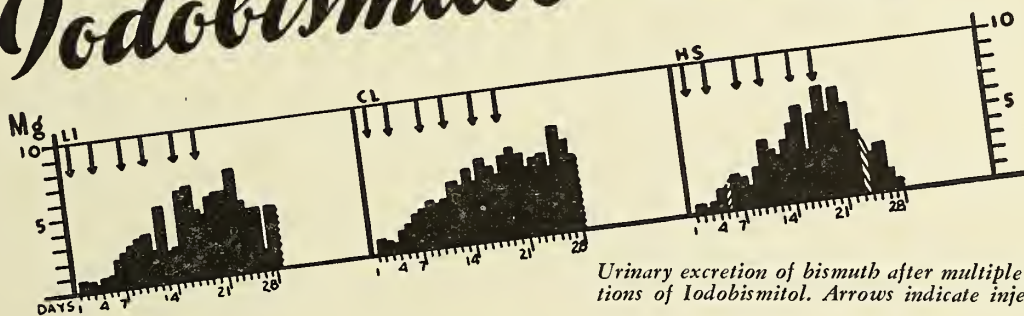
In *State vs. Bonham* 98 Wash. 489, the court said:

"To determine the meaning of the term 'osteopathy' resort may be had to the definition and descriptions of it given by the founder of the practice, by those



**FOR  
SUSTAINED  
BISMUTH  
EFFECT  
USE**

*Iodobismittel with Saligenin*



ACCORDING to the Council on Pharmacy and Chemistry—"Probably those compounds of bismuth will have the best spirocheticidal effect that are able to keep the therapeutic level of bismuth at such a continuous height that it will be reflected in the urine with a level of 0.002 Gm. or more of metallic bismuth per day."

That Iodobismittel with Saligenin meets this requirement was shown by a recent clinical study.<sup>1</sup> Two-cc. doses of Iodobismittel with Saligenin were given twice weekly for three weeks. The charts illustrated above show the urinary excretion over a period

of four weeks—49% of the bismuth having been excreted. Iodobismittel with Saligenin was the only preparation so studied capable of maintaining a therapeutically active concentration of bismuth in the blood stream as manifested by a constant urinary excretion equivalent to or in excess of 0.002 Gm. daily.

Iodobismittel with Saligenin may be used alone or with the arsenicals in both early and late syphilis. It presents bismuth largely in anionic (electro-negative) form. It is a propylene glycol solution containing 6% sodium iodobismuthite, 12% sodium iodide, and 4% saligenin (a local anesthetic).

### SQUIBB ARSENICALS

Neoarsphenamine Squibb, Arsphenamine Squibb, and Sulpharsphenamine Squibb are prepared to produce maximum therapeutic benefit. They are subjected to exacting controls to assure a high margin of safety, uniform strength, ready solubility, and high spirocheticidal activity.

For literature write to Professional Service Dept., 745 Fifth Ave., New York

<sup>1</sup> Sollmann, T., Cole, H. N., Henderson, K., et al.: *Amer. J. Syph., Gon. & Ven. Dis.* 21:480 (Sept.), 1937.

**E·R·SQUIBB & SONS, NEW YORK**  
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.



who teach and practice it, and by lexicographers who define it as a science."

Following the lead in the Bonham case, the plaintiff, the defendant and amicus curiae all, with the view of giving the court information upon which it could intelligently act, quoted copiously from the catalogues and publications of the osteopathic colleges, from the writings of Dr. Still, the founder of the system, from the official resolutions and proceedings of the American Osteopathic Association, from the journal of that Association, and from the books and writings of the leading teachers, exponents and practitioners of the science of osteopathy. We have no way of knowing what importance the court attached to these quotations, but certain it is that all parties were content to have the court consider them at their face value. That such was the defendant's purpose is demonstrated by the following statement appearing on page 2 of his reply brief in which he said:

"We propose to confine this brief to proving that 'operative surgery' (As understood by the State and the Society) has been taught and practiced in the osteopathic college at least since 1897, that the same text books, instruments, methods and procedures are used and that osteopathy includes and comprehends 'operative surgery' as a part of its therapy and did so in 1913 when the Kansas law was passed; that osteopathy has never been a drugless science;"

his proof consisted of various excerpts from many of the sources already mentioned. Before the decision was rendered, the defendant apparently saw no incongruity on the part of the court in deciding, upon the authorities submitted, on a denigration of the broad therapeutic principles of osteopathy as they were known in 1901 and 1913, which, as we have indicated, was a necessary preliminary to a correct determination of question 8. Had he then felt, as he now seems to feel, would he not have suggested to the court that the decision upon the one controlling question (number 8) be held in obedience until he could furnish evidence of what was taught in the osteopathic colleges from 1901 to 1913? Defendant invited the court to rule on the case as it then stood and it does not come with very good grace for him to ask this court to retrace its steps, and appoint a commissioner to hear evidence upon a matter that is now *res judicata*. Obviously, the defendant, in asking for a commissioner, intends to ask this court to write a new definition of osteopathy based solely on what was taught in the osteopathic colleges from 1901 to 1913,—in short, a definition substantially to the effect that the system of osteopathy at the time indicated included and comprehended the practice of drug therapy and operative surgery.

Presumably, he makes this request on the theory that because Section One (65-1201) of the osteopathic statute provides for the issuance of a license "to practice osteopathy in the State of Kansas, as taught and practiced in the legally incorporated colleges of good repute," the courts of this State cannot assume to define the practice of osteopathy without first hearing evidence of what these colleges taught, following which they could give only such definition as would be in complete harmony with such teaching. Such an argument implies that for the past thirty-seven years the legislature and the courts of this State have been dealing with a profession about which they knew absolutely nothing, and, if carried to its logical conclusion, means that they will remain in profound ignorance of the subject until such time as the musty files and records of the osteopathic colleges (many of which have long since ceased to exist) are removed from the realms of antiquity,

carefully dusted off, and exhibited to the judicial eye of this court.

It was our original contention that the clause above quoted should be treated as mere surplusage; that to give it the effect now contended for by defendant would offend against the constitutional inhibition against the illegal delegation of legislative power because no definite, readily ascertainable standard or criterion was fixed by which the scope of the practice of osteopathy could be measured.

The court did not go with us on this, but it did say in answer to question 6, that the clause in question does not authorize the state board of osteopathic registration and examination to approve schools or colleges which do not conform their teachings to the *fundamental principles of osteopathy*. Earlier in the opinion in the discussion of question 2, the court defined the fundamental principles of osteopathy as a drugless system of healing without the use of operative surgery. From this, we conclude that the court, in construing this part of the statute, was of the opinion that the 1913 legislature well knew what the fundamental principles of osteopathy were at the time the act was passed and instead of defining them in express terms, simply referred to the teachings and practices of the accredited colleges as illustrative of those basic principles.

It must be remembered that what the 1913 legislature was attempting to regulate was the *practice of osteopathy* as it was known and understood in Kansas. That profession had already been recognized and regulated in this State for twelve years. The legislature had before it a comprehensive definition of the science of osteopathy written by this court in the case of *State vs. Johnson* in 1911. The 1913 legislature was again dealing with the same subject and it is to be presumed that the judicial definition of osteopathy contained in the *Johnson* case was in the legislative mind when the new act was passed and that it became a part thereof.

In 25 R. C. L. page 1063, it is said:

"The legislature is presumed to have had former statutes before it, to have been acquainted with their judicial construction, and to have passed new statutes on the same subject with reference thereto."

Since the 1913 legislature knew that fundamentally the system of osteopathy did not comprehend the use of drugs and operative surgery, it is safe to assume that it likewise knew that the accredited osteopathic colleges were teaching and practicing osteopathy in conformity with that philosophy. That what osteopathy was and what the osteopathic colleges taught and practiced as osteopathy was common knowledge in 1913, there can be no doubt. The following citations, while applying principally to the common knowledge of which the courts may take notice, are nevertheless, equally applicable to legislative bodies;

"It is not necessary for courts to wait, before taking judicial notice of a thing, until everybody knows and understands it. The meaning of a term has become a part of our common knowledge when it is generally understood by persons familiar with the subject." *Topeka vs. Stevenson* 79 Kan. 394.

"Judicial notice will be taken of the general duties and character of occupations universally called as professions, such as the legal and the medical professions." 25 C. J. page 75 Sec. 1846 N. 35.

"We take judicial notice of the fact known as a matter of common knowledge, that chiropractic, 'a system, or the practice of adjusting the joints of the spine by hand for the curing of disease' (Webster), imparts a study, knowledge and treatment of the human vertebrae, which include the bones of the



# Every Product Exhaustively TESTED!



Physicians must have preparations the ingredients and efficacy of which are of unquestioned value. The steady growth of The Smith-Dorsey Company from 1908 is the best indication that our products measure up to these requirements.

## PHARMACEUTICALS

YOU CAN

PRESCRIBE WITH CONFIDENCE

Every Smith-Dorsey product is safeguarded in three ways.

- 1 We operate a control laboratory for the purpose of testing raw materials for purity.
- 2 Finished products are thoroughly tested for conformity to label statements.
- 3 No new products are released without subjecting them to physiological tests.

Our laboratory is modern and complete and is manned by competent university trained chemists. No expense is spared to make research complete. No preparations are ever offered the laity.

Such is the background of Smith-Dorsey products.

**THE SMITH-DORSEY COMPANY** *Lincoln, Nebraska*  
FOUNDED 1908



# OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request

**OAKWOOD SANITARIUM**  
Tulsa, Oklahoma, Route 6

NED R. SMITH, M.D.  
Medical Director

S. CHARLTON SHEPARD, M.D.  
Attending Internist

T. N. NEESE  
Business Manager

DAISY N. NEESE  
Superintendent



neck . . . ." Maryland Casualty Company vs. Hill 91 S. W. (Texas 2d.) Page 391-393.

From the foregoing, it seems clear to us that the 1913 legislature never intended that the courts of this state should have no way of defining the practice of osteopathy other than by hearing evidence of what was taught and practiced in the reputable osteopathic colleges. The practical difficulties attendant upon such an interpretation are varied and numerous. Twenty-five years have passed since the statute was enacted and some of the schools then in existence have long since been closed. Authentic records in many such instances might be difficult to obtain. Colleges that were accredited in 1901 may not have been accredited in 1913 or in intervening years. The teaching corps in each college has, without doubt, undergone a great change and as the evidence as to what was actually practiced as osteopathy in those years would, in a large measure, have to come from them, it would probably be fragmentary and hazy.

Should the plaintiff undertake to unearth this evidence, it requires no stretch of the imagination to conclude that the witnesses would not be entirely helpful. But, for the sake of argument, let us suppose that the evidence could be produced, how could it affect the result to be reached in this case? Would this court be justified in saying that the definitions of osteopathy contained in the opinions in the Johnson case, the Eustace case and the one at bar are all wrong, and that much to the surprise of everyone there was, in reality, no distinction between the practice of osteopathy and the practice of medicine and surgery; that the 1913 legislature was laboring under the delusion that osteopathy was something different from the practice of medicine and surgery and that it really did a futile thing when it provided for a separate board for osteopaths. Such a state of affairs is too absurd to be contemplated. In 25 R. C. L. 959, it is said:

"Another occasion for construing a statute is where uncertainty as to its meaning arises not alone from ambiguity of the language employed, but from the fact that giving a literal interpretation to the words will lead to such unreasonable, unjust or absurd consequences as to compel a conviction that they could not have been intended by the legislature."

In *City of Emporia vs. Norton* 16 Kan. 236, it is said:

"In determining the intent of the legislature the court is not limited to a mere consideration of the words employed, but may properly look to the purpose to be accomplished, the necessity and effect of the statute, under the different constructions suggested."

The title of Chapter 290 Laws of 1913 says that it is an act "concerning the *practice of osteopathy etc.*" In section one of the act the words "practice of osteopathy" appear seven times and the words "study of osteopathy" appear twice.

65-1206, G. S. 1935, is the section which provides the penalty for unlawfully using "the science or system of osteopathy" and in this section, the words "practice of osteopathy" appear twice. Thus in the title and throughout the act, the legislature referred to "the practice of osteopathy" on ten different occasions without in any way mentioning the "as taught and practiced" clause, which, as we have seen, was used but once in the entire act. This indicates clearly that the legislature recognized the fact that it was dealing with "the practice of osteopathy" as it was then commonly known and as it had theretofore been defined by this court, and presumably as it was then taught and practiced in the osteopathic colleges.

Defendant's request for the appointment of a commissioner in order that he may have an opportunity to

attempt to prove that osteopathy was something other than what the 1913 legislature and the courts of this State understood it to be, is based on neither reason nor warrant of law and we respectfully suggest that such request should not be granted.

By way of digression, and from a purely practical standpoint, we feel constrained to inquire just how this evidence defendant says he will attempt to produce would square with the report of the committee on School of the American Osteopathic Association, adopted unanimously by the House of Delegates at the annual meeting of the A. O. A. in 1914, as the same appears in the August 1914 issue of the Journal at page 727:

"(a) They (the osteopathic colleges) shall preserve undefiled the osteopathic principle of the prevention, cause and cure of disease.

(b) They shall maintain an invariable stand against the etaching and practice of drug therapeutics.

(d) Engaging in the teaching or drug therapeutics by any member of this Association shall be cause for depriving a membership, and the participation of such teaching by any college shall be cause for refusal by the Association of recognition of such college as a cooperating organization."

Surely, he could not go before a commissioner or before the court and, with a straight face, argue that the reputable osteopathic colleges whose course of study was approved by the American Osteopathic Association, as provided in 65-1202 G. S. 1935, actually and in good faith taught *materia medica* and countenanced the use of drugs as a part of the osteopathic system of healing. In our judgment, this one resolution standing alone is sufficient to foreclose further inquiry along that line.

#### WHAT OCCASION IS THERE FOR THE APPOINTMENT OF A COMMISSIONER TO HEAR EVIDENCE AS TO WHAT DEFENDANT HAS BEEN PRACTICING?

The answer to this question depends entirely upon the construction to be placed upon defendant's answer. In paragraph four of the plaintiff's petition, it is alleged that the defendant has, for many years past, been engaged in the practice of medicine and surgery; that he operates a hospital and treats his patients therein by medical treatment and by surgical treatment.

Defendant in his answer, among other things, states:

"Defendant admits that he is a duly licensed osteopathic physician and surgeon as alleged in paragraph 4 of said petition and states that as such he has, for many years treated both medically and surgically, as alleged in said paragraph 4, and is now so doing.

Defendant for his further answer states that he is authorized, empowered and privileged to engage in the practice of medicine and surgery, including drug therapy as defined by Section 65-1201 G. S. 1935 . . . ."

If we interpret defendant's language correctly, then it seems clear that the parts of the answer, above quoted, admit the single charge that the state has made against him, to-wit: that he is engaged in the practice of medicine and surgery, and that he justifies his actions upon the ground that the osteopathic act permits him to engage in such practice.

It is true that in other parts of his answer, he claims to have been treating patients, both medically and surgically, as taught and practiced in legally incorporated colleges of osteopathy of good repute, but under the decision of this court he has been denied the right to practice medicine



ACCEPTABLE TO FASTIDIOUS PATIENTS

## NEO-SILVOL



*Neo-Silvol (Colloidal Silver Iodide Compound)* is particularly suited for use in eye, ear, nose and throat. It is antiseptic in action and has the added advantages of being non-staining and non-irritating. Even in 25 to 50 per cent solution Neo-Silvol will not injure delicate mucous membranes.

Ten to twenty per cent solutions of Neo-Silvol are suitable for most eye infections; gonorrheal ophthalmia may call for stronger solutions—25 to 50 per cent. In

inflammatory conditions of the nose, naso-pharynx, pharynx and tonsils, Neo-Silvol (10 to 25 per cent strength) may be sprayed or swabbed on the involved areas three or four times daily. Neo-Silvol solutions are easily prepared by dissolving the glistening, cream-colored granules in water.

Supplied in six-grain capsules, packages of 50 and 500, and in 1-ounce and 1/4-pound bottles.



and surgery at all, therefore his original admission stands without qualification.

While we do not wish to be accused of assuming a dogmatic attitude upon this question, yet it does seem as though the defendant, by his answer, has admitted facts which bring him squarely within the terms of the medical practice act and that the appointment of a commissioner would serve no useful purpose in this case.

#### THE MOTION FOR JUDGMENT

We are advised that the State has filed a motion for judgment. We are firmly convinced that the motion should be sustained and this law suit ended.

The case was originally filed for the sole purpose of determining the one broad, general question: Is the defendant privileged to practice drug therapy and operative surgery under his osteopathic license? The court has said that he is not. A continuation of this litigation for the purpose of defining the exact limits within which the osteopathic profession may lawfully function is entirely unwarranted. In the opinion the court said:

"In this connection the briefs put to us specific questions, such as: May one licensed to practice osteopathy, under stated circumstances, administer a simple drug, as a specific drug, for remedial purposes, or use surgical instruments. We are not called upon to answer detailed questions of that character, nor would we deem it proper for us to do so. We are called upon to interpret our statutes."

We agree whole heartedly with this conclusion. The best that could have been hoped for in this case as a general declaration of the law upon the subject of the right of the defendant to practice medicine and surgery meaning, by that, drug therapy and operative surgery. The State asked no more than that and if judgment is rendered upon the plaintiff's motion, the defendant will still have the full and complete right to practice osteopathy as defined by this court with all modern developments and improvements of the science. It is to be presumed that the defendant will obey the mandate of this court and for all practical purposes, litigation upon this subject will be at an end.

Should the court undertake to hear evidence upon questions of the thousand and one phases of defendant's practice for the purpose of charting a definite course for him to follow in each particular instance, it is easy to see the practical difficulties that would be encountered. Prescribing the exact line of demarcation between the two schools of healing, if indeed it can be done at all with any degree of accuracy, is peculiarly a legislative function.

As the court indicated in its opinion, both the legislature and the court dealt with the two schools of healing in terms quite general, and until the legislature takes further action, specific instances where it might be claimed that one engaged in the osteopathic profession has invaded the field of medicine and surgery will, of necessity, have to be dealt with in the various district courts of the State where such litigation properly belongs.

We recognize that there is a twilight zone between the regular school of medicine and osteopathy where it is exceedingly difficult to determine just where the one ends and the other begins, and, while we are not authorized to speak for the State Board of Medical Examination and Registration, we, nevertheless, feel confident that those who are charged with the duty of enforcing the medical practice act will not be unmindful of the full import of the court's injunction that "Professional men of high standing seldom have serious difficulty with such details."

May we suggest that if the plaintiff's motion for judgment is sustained, the order in this case should be no broaded than the prayer of plaintiff's petition, that is to say, the defendant should be ousted from the practice of drug therapy and operative surgery. The defendant should have no difficulty in adjusting his practice to conform with an order of that kind.

ment is sustained, the order in this case should be no broaded than the prayer of plaintiff's petition, that is to say, the defendant should be ousted from the practice of drug therapy and operative surgery. The defendant should have no difficulty in adjusting his practice to conform with an order of that kind.

#### KANSAS CITY SOUTHWEST CLINICAL SOCIETY

The following communication has been received from the Kansas City Southwest Clinical Society Committee on Arrangements:

"Every doctor to come to Kansas City October 3rd and stay through the 6th for the Clinical Conference of the Kansas City Southwest Clinical Society. Every fall for fifteen years, the society has brought to the physicians of the Southwest a conference on clinical subjects.

This year will be like the others, yet different. The society realizes that the medical world today is different from what it was 15 years ago. Medical news reaches all physicians now almost as quickly as it reaches the teacher, the research man and the specialist in the large medical centers.

A Clinical Conference today must be different. It must tell the new physician how he can meet the many subjects that confront him in his all-inclusive practice. It must analyze the many new ideas and procedures that have been put forth during the past year and it must, in these days of restricted incomes, give a two-dollar value for every dollar spent.

The 1938 Clinical Conference in Kansas City has been modelled along these lines. Every minute will be spent discussing subjects which are of practical diagnostic and therapeutic value, analyzing carefully all of the new things in medicine which the doctor hears about but has had no opportunity to investigate carefully and analytically. It will give every doctor who attends many worthwhile points and many worthwhile ideas to take home with him. The program contains the names of leaders in every specialty, students and practitioners of wide experience.

Again we say, Kansas City invites the doctors of the Southwest to the best Clinical Conference, October 3 to 6, 1938."

#### CHAIRMEN'S CONFERENCE

A meeting of all Committee Chairmen was held in Topeka on September 11 to discuss and approve committee accomplishments for each committee during the present year.

Individual programs were presented to each committee with the request that they attempt to complete all of the projects assigned to them and any other projects they care to assume.

Since space does not permit a complete report of the assigned programs of the twenty society committees, the following ones are presented as examples:

##### Committee on Automobile Accidents

1. Assistance to Kansas State Highway Commission in the matter of automobile accident reporting.
2. Study of tests to determine drunken driving.
3. Study of drivers license requirements.
4. Study of possibilities for physical examination of drivers involved in automobile accidents.

##### Committee on Maternal and Child Welfare

1. Assistance to the Kansas State Board of Health in presentation of Social Security Act post-graduate courses on obstetrics and pediatrics. Conferences with

# Grandview Sanitarium

KANSAS CITY, KANSAS, (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of super accommodations for the care of:

NERVOUS DISEASES  
MILD PSYCHOSES  
THE DRUG HABIT  
AND INEBRIETY.

Situated on a 20-acre tract adjoining City Park of 100 acres. Room with private bath can be provided.

The City Park line of the Metropolitan Railway passes within one block of the Sanitarium. Management strictly ethical.

Telephone: Drexel 0019

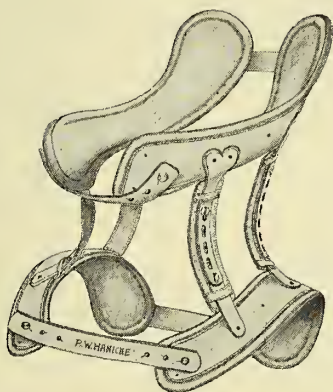
SEND FOR BOOKLET

**E. F. DeVILBISS, M.D., SUPT.**

OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.

## Apparatus for Fracture of Cervical Vertebrae

(Our Design)



**P. W. HANICKE MFG. CO.**

1013 McGee Street  
KANSAS CITY, MO.

Tel. Victor 4750

*Behind*

## MERCUROCHROME

(dibrom-oxymercuri-fluorescein-sodium)



*is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

**Hynson, Westcott & Dunning, Inc.**  
BALTIMORE, MARYLAND



representatives of Kansas State Board of Health on other maternal and child welfare portions of the Social Security Act.

2. Preparation of a more practical and efficient Kansas immunization program, and assistance in having the program adopted throughout the state. Study of compulsory vaccination laws. Other assistance on present Kansas small pox record.

3. Study of Kansas maternal and infant morbidity and mortality statistics, and of reporting regulations upon which these are based. Recommendations thereon to Kansas State Board of Health and to the county medical societies.

4. Study of present quarantine regulations and of present regulations pertaining to the reporting of communicable diseases. Recommendations thereon to Kansas State Board of Health and to the county medical societies.

5. Preparation of a pamphlet outlining a health program for expectant mothers and for infants and children.

6. Preparation of a pamphlet for physicians on obstetrics and pediatrics.

7. Assistance on problem of Wassermanns for expectant mothers.

8. Study of "time payment" plans for obstetrics and periatrics, and of Kansas obstetrical fees.

9. Study of present status of analgesia and barbiturates, etc., in obstetrics and recommendations thereon.

#### Committee on Scientific Work

1. Assistance to Shawnee County Medical Society in preparation of scientific program for the 1939 annual session.

2. Issuance of bulletins to the county medical societies stressing the need:

a. for county medical societies to hold at least monthly scientific meetings.

b. for members to attend at least two inter-sectional or national post-graduate meetings each year.

c. for members to take advantage of the Library Loan Packet Service of the A. M. A.

d. for members to prepare a greater number of scientific articles for publication.

e. for members to prepare a greater number of scientific exhibits for display at Kansas, A. M. A., and other meetings.

f. for the county medical societies to feature post-graduate work on preventive medicine, heart disease, cancer, nephritis, venereal disease, obstetrics and pediatrics.

g. for members to cooperate with the Kansas State Board of Health in full and complete reporting.

3. Preparation of a list of scientific movies recommended for county medical society showing.

4. Establishment of arrangements wherein the Kansas State Board of Health will report all epidemics to the Committee in order that the committee may cooperate in control measures.

5. Establishment of arrangements wherein the Kansas State Board of Health will maintain closer relationship with the Kansas profession through use of bulletins.

#### Committee on Tuberculosis

1. Presentation of a state-wide post-graduate program on tuberculosis.

2. Preparation of a tuberculosis diagnostic pro-

gram for recommendation to the county medical societies.

3. Preparation of recommendations to be made to the legislature concerning additional tuberculosis facilities in Kansas.

4. Expansion of pneumothorax and other treatment and diagnostic facilities for tuberculosis in Kansas.

5. Preparation of a scientific pamphlet on diagnosis and treatment of tuberculosis for distribution to physicians.

6. Study of present requirements for admittance to state tuberculosis institutions. Recommendations thereon.

7. Supervision of a section on tuberculosis in the Journal.

8. Preparation of scientific exhibits on tuberculosis by Kansas Tuberculosis and Health Association, Kansas State Board of Health, and Norton Sanitorium.

#### Committee on Venereal Disease

1. Presentation of a state-wide post-graduate course on venereal disease.

2. Publication of a scientific brochure on venereal disease.

3. Cooperation with the Kansas State Board of Health in the development of an efficient venereal disease reporting plan, and issuance of a bulletin campaign urging compliance with the plan. Institution of records in the Kansas State Board of Health showing for comparative purposes the annual incidence of venereal disease discovered by state institutions, approved hospitals, laboratories, and other places of definite control.

4. Preparation of a program to increase the number of dark field examination facilities in Kansas.

5. Study of present venereal disease legislative trends in other states, and recommendations thereon applicable to Kansas.

6. Assistance to the Kansas State Board of Administration in the handling of its venereal disease problems.

7. Approval and distribution of lay educational pamphlets on venereal disease for physicians to give to patients.

8. Study of the Federal venereal disease program, and recommendations thereon.

9. Issuance of bulletins stressing the need:

a. for the use of dark field examinations.

b. for the use of routine Wassermanns on expectant mothers.

c. for all venereal disease patients to be treated adequately and at a price they can afford to pay.

d. for lay and professional programs on venereal disease to be presented by county medical societies.

e. for each county medical society to make certain that all indigent venereal disease patients are receiving adequate treatment.

Dr. N. E. Melencamp, President, also presented the following recommendation to the committee chairmen which was approved:

That to expedite committee work each committee arrange to hold an early meeting for approval and outline of the handling of its work; that the individual projects be delegated to individual members of the committee; and that each committee member accept responsibility for completion of the project assigned to him.



## CO-ORDINATION

When the success of a plan depends upon its perfect execution there must be strict co-ordination between the individuals involved.

No program of treatment can relieve the incidence of constipation unless the patient is willing to co-ordinate his efforts with those of the physician. That is why so many doctors prescribe Petrolagar for their patients. Its pleasant taste and gentle, consistent action are acceptable to the patient as well as to the physician.

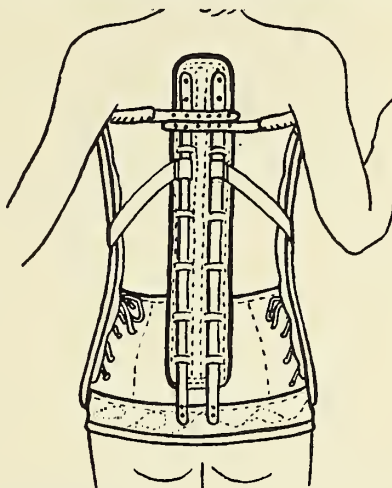
Five types of Petrolagar provide a choice of medication to suit the individual case. Samples on request.

Petrolagar Laboratories, Inc. • Chicago, Ill.

*Petrolagar... Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.*



## A COMPLETE SERVICE



We make all types of braces, splints, belts, elastic hose, crutches, arch supports and special apparatus.

If your patients cannot come to us we will come to them. Prices reasonable.

Camp's Supports

**Kansas City Brace & Splint Co.**

Phone Drexel 0640

847 Minnesota Avenue

Kansas City, Kansas

16,000

ethical



Since 1902

## practitioners

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

**\$1,500,000 Assets**

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited with the State of Nebraska**

for the protection of our members residing in every State in the U.S.A.

**PHYSICIANS CASUALTY ASSOCIATION**

**PHYSICIANS HEALTH ASSOCIATION**

400 First National Bank Building

OMAHA - - - NEBRASKA



Since 1912



It is believed that this plan will save a considerable number of committee meetings, that it will enable a more complete study of individual projects, and that under this plan it should be relatively easy for the committees to complete the 136 projects assigned to them.

### COMMITTEE MEETINGS

The meeting of the Committee on Public Policy was held in Topeka on September 11. Plans were made for the work of this committee during the current year which will be bulletinized to the membership within the near future.

Other committee meetings to be held within the near future are as follows:

Committee on Tuberculosis, Wichita, September 18.

Committee on Maternal and Child Welfare,

Committee on Conservation of Eyesight, Lawrence, September 25.

Committee on Medical Schools, Kansas City, October 5.

It is also planned that a meeting of the Council will be held during the first part of October to discuss the special meeting of the American Medical Association House of Delegates and several recommendations made by the Committee on Public Policy.

### POSTGRADUATE COURSE

The Society Committee on Control of Cancer has recently completed arrangements for presentation of a state wide postgraduate course on cancer. The course is being sponsored by the Kansas State Board of Health in cooperation with the Society Committee, and is being financed from funds made available to the Kansas State Board of Health by the United States Public Health Service.

Plan of the course is that twelve professional meetings will be held in certain towns of various parts of the state—six meetings to be held during September and six more to be held during next March or April.

The speaker for the course is Dr. Nathan A. Womack, Director of the Tumor Clinic of Barnes Hospital, St. Louis, Missouri. The subjects he presents will pertain mainly to the diagnosis and control of cancer. The material to be presented at the second series of meetings in March or April will be somewhat different from that presented at the first series.

The September meetings are being held at the following dates and places:

September 19, Marysville, City Hall.

September 20, Beloit, Community Hospital.

September 21, Colby, Opelt Hotel.

September 22, Dodge City, Lora Locke Hotel.

September 23, Kingman, County Hospital.

September 24, Chanute, Tioga Hotel.

The course is open to all doctors of medicine without registration charge, and the physicians and county medical societies of Marshall, Mitchell, Thomas, Ford, Kingman, and Neosho counties are hosts for the meetings.

### NATIONAL HEALTH PROGRAM

The medical profession throughout the United States is greatly interested in the proposed National Health Program announced at a meeting of the Interdepartmental Committee to Coordinate Health and Welfare Activities in Washington on February 14, 1938.

The program which was prepared by the Technical Committee on Medical Care of the Interdepartmental

Committee to Coordinate Health and Welfare-Activities contained the following stated objectives:

A better understanding of the national needs in the field of health and medical care.

The formulation of policies which would enable the medical and other professions, private organizations, federal, state and local agencies and individual citizens to cooperate in efforts to meet these needs.

Recommendations as follows: Expansion of public health and maternal and child health services; expansion of medical services and facilities with special emphasis on new diagnostic and therapeutic services; consideration of a program for raising money by general taxation and special tax assessments and by special insurance contributions to provide medical care for every one; a disability compensation program for payment of wages during sickness.

Recommendation for a federal position on health and medical service under which all the health and medical services of the federal government might be united.

All members who have not read the detailed account of the program are urged to read it in the July 30, 1938 issue of the Journal of the American Medical Association on pages 426 to 454.

### USE OF BARBITURATES IN SURGERY, II

(Continued from page 383)

soundly. Three interrupted dermal sutures were placed in a wound five centimeters long above the left eye. She was quiet except for a slight twinge each time the needle pricked her skin, lapsing into slumber between stitches.

#### Case 3

A boy, aged nine, was hit in the face with a ball bat. His nose was broken and displaced to the right. He was given two capsules of seconal, one and one-half grains each, and an hour was allowed to elapse. Using a curved forceps inserted into one nostril for traction, the nose was lifted back into place. The boy squirmed some while this was being done, but did not awaken or cry out.

#### Case 4

A slender nervous girl, aged twenty, had a large peri-tonsillar abscess. Two capsules of seconal, one and one-half grains each, were administered. Thirty minutes later, she had become quite drowsy. The abscess was incised without undue pain or resistance.

#### Case 5

A girl, aged five, began to bleed a week after tonsillectomy. A capsule of seconal, one and one-half grains, was given by mouth with the intention of quieting her so that a pack could be held against the bleeding vessel in the tonsil site. As she became less restless the bleeding decreased, stopping entirely within thirty minutes, when she went to sleep. She awoke after four hours, and had no further bleeding. This procedure has since been employed in four other cases of delayed post-operative hemorrhage from the tonsil or adenoid site, with the same result.

# *You Remember* **THIS MAN— DOCTOR**



For thirty years he worked in the big factory in your town. Our Safety Engineering Service helped him to get through most of those years without an accident, but finally a terrible, unavoidable, injury occurred. He chose you for his doctor—wisely, for your skill and your care pulled him through. During his weeks of agony, and the long months of convalescence, our checks kept him from worrying; and your bill was paid promptly, with our thanks, when it was presented.

We were partners in giving this man a long,

useful life, doctor, as we have been in thousands of other cases. Can't we be partners in one more thing—your insurance requirements? The same complete protection is yours, the same equitable, prompt adjustments, the same painstaking service. Because we are a Mutual Company, a share of the savings is yours. Drop a line to our nearest office, and let us explain the Protection, Service and Saving we offer on Automobile, Public Liability, Workmen's Compensation, Plate Glass, Burglary, Fire and Tornado Insurance.

**EMPLOYERS MUTUAL  
LIABILITY INSURANCE CO.**

*Employers  
Mutuals*

**EMPLOYERS MUTUAL  
FIRE INSURANCE CO.**

*Automobile, Public Liability, Workmen's Compensation  
Plate Glass, Burglary, Fire and Tornado Insurance*

**HOME OFFICE: WAUSAU, WISCONSIN**

**WICHITA: 914 UNION NATIONAL BLDG.**

*Branch Offices and Resident Representatives throughout the Middle West  
Consult Your Local Telephone Directory*



## AUXILIARY

### PRESIDENT'S MESSAGE

Dear Auxiliary Members:

The weather and scenery to and from San Francisco made our trip very delightful and the week in San Francisco was so cool and pleasant that we all voted to stay longer although it was impossible to do so at that time. I kept wishing that every Auxiliary member could have attended the National Auxiliary meetings with me as I was inspired a great deal with each one.

At the pre-board meeting Monday morning, our National President, Mrs. Augustus S. Kech, reported that she had traveled 50,000 miles and visited thirty-four states. Her goal is to have 20,000 members this year, and she reported 20,206 members with an increase of 1,918 new members. Three new states have joined the Auxiliary: Montana, Vermont, and South Dakota. Mrs. Kech addressed 124 meetings and wrote sixteen articles for publication. Mrs. Robert D. Homan, Archives Chairman from Texas, sat on my left. She has devoted much time and traveled many miles between Texas and Chicago getting the archives in order and has done a fine piece of work for the Auxiliary. Mrs. G. C. Hicks, State President of Michigan, sat on my right. I thought the reports were very interesting and the committees have worked very hard all winter.

Monday afternoon we had the choice of seeing San Francisco or going over the San Francisco-Oakland Bay Bridge to the University of California. In the evening we went to Chinatown.

All our meetings were held in the Fairmont Hotel. The board meetings were held in the Empire Room, the exhibits in the Tapestry Room, and the general sessions in the Gold Room. The breakfast and Auxiliary luncheon were in the Terrace Room. The hotel is a very beautiful

place and located at the top of Nob-Hill. Tuesday morning there was a Southern Breakfast honoring Mrs. Augustus S. Kech.

The Formal Opening of the Convention  
Mrs. Kech Presiding

Address of Welcome.....Mrs. Clifford H. Wright,  
California

Response.....Mrs. Rollo K. Packard, Illinois  
Reports of Committees

President's Message.....Mrs. Kech  
Presentation of Mrs. Charles C. Tomlinson, President-elect, who is from Omaha, Nebraska, and a near neighbor to us.

The general session continued on Wednesday. The State Presidents gave their reports. The election of officers was held and installation followed with Mrs. James F. Percy of Los Angeles presiding. All of the states are on their toes and are doing fine Auxiliary work. Arkansas received the cup for the highest percentage of new members. The Auxiliary luncheon in the Terrace Room was well attended and the speakers were very interesting. At the close sixteen daughters from doctor's families came in for the Lei ceremony, and it was really very beautiful.

The conference meetings came on Wednesday afternoon. The Public Relations Meeting was most interesting and I must mention Mrs. A. Haines Lippencott, Chairman of Public Relations. She is an inspiring speaker, and, as we all know, the Public Relations Chairmanship is a very important office. It would be impossible to hear too much on this subject. In the evening the Auxiliary members were invited to the San Francisco County Medical Society which is housed in one of San Francisco's old historical homes. We were entertained with music, a fashion show, and refreshments.

The post-board meeting was held on Thursday with Mrs. C. C. Tomlinson presiding. At 11:00 o'clock we took a sight-seeing trip to Stanford University and luncheon at the Allied Arts. The trip back took us through Burlingame and all its beautiful estates.

At 7:00 p.m. that evening we attended the "Bring Your

## DEPENDABLE PRODUCTS FOR PHYSICIANS

### PRESCRIBE OR DISPENSE ZEMMER

Pharmaceuticals . . . Tablets, Lozenges, Ampoules, Capsules, Ointments, etc. Guaranteed reliable potency. Our products are laboratory controlled.

Write for catalog.

*Chemists to the Medical Profession*

**THE ZEMMER COMPANY**

Chemists to the Medical Profession

Oakland Station KA 6-38

Pittsburgh, Pennsylvania



## NEUROLOGICAL HOSPITAL

Twenty-Seventh and The Paseo  
Kansas City, Missouri

Modern Hospitalization of  
Nervous and Mental Ill-  
nesses, Alcoholism and  
Drug Addiction.

## THE ROBINSON CLINIC

G. WILSE ROBINSON, M.D.  
G. WILSE ROBINSON, JR., M.D.

# WOODCROFT HOSPITAL



## PUEBLO, COLORADO

Founded 1896 by Dr. Hubert Work

A modern, newly constructed sanitarium for the scientific care and treatment of those nervously and mentally ill, the senile and drug addicts.

**CRUM EPLER, M.D.**  
Superintendent

Representing lines anyone can be proud of—Loxit, Wils-  
edge, Numont, Panoptik, Univis, Soft-Lite, Orthogons, etc.,  
etc.

*Order with pride and receive with satisfaction*

**QUINTON-DUFFENS OPTICAL COMPANY**

*Your Local Independent Wholesaler*

**TOPEKA**

**HUTCHINSON**

**SALINA**

# THE Lattimore Laboratories

**TOPEKA, KANSAS**

**J. L. Lattimore, M. D. Director**

**A. C. Keith, B. S. Chemist**

**Allen Gold, M.A., M.T.**

**H. C. Ebendorf, M. T.**

**We invite consultation about the case that needs pathological service.**

**Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00**

*Containers furnished upon request.*

## OFFICES:

**Topeka, Kansas**

**El Dorado, Kansas**

**Sedalia, Mo.**

**McAlester, Okla.**



Husband Dinner" at the Fairmont Hotel. I want you all to know that the Kansas ladies presented me with the most gorgeous orchid corsage to wear to the dinner—a very pleasant surprise. At 9:30 that same evening the President's Reception and Ball was held at the Palace Hotel, and the next morning we visited the exhibits at Civic Center and then visited Chinatown. In the evening we saw a parade and carnival in Chinatown that was for the war refugees of China. The rice bowl was a large bowl about six to eight feet in diameter and the spectators dropped money into it as they paraded by. The dragon came out at 1:00 a.m.

I hope this report of the Auxiliary Convention in San Francisco can be of some help to all of you. The report of other states doing so much will certainly inspire us to do our part, I feel sure. Kansas has never failed yet.

I hope you are all enjoying your summers.

Mrs. Frank E. Coffey.

## SURGICAL FITTINGS

Graduate Fitters

Private Fitting Rooms

Your patients requiring **SURGICAL SUPPORTS** for Abdominal Ptosis conditions, Sacro-Iliac strains, Maternity, Post-Operative weakness, and different forms of Hernia, will be correctly fitted, when referred to

### A. M. Petro & Son

Surgical Fitters and Pharmacists

839 N. KANSAS AVE., TOPEKA, KANSAS

ELASTIC HOSIERY—TRUSSES—  
CURTIS PTOSIS SUPPORTS

## Cook County Graduate School of Medicine

(In affiliation with COOK COUNTY HOSPITAL)  
Incorporated not for profit

### ANNOUNCES CONTINUOUS COURSES

**MEDICINE**—Personal Courses and Informal Course starting every week. Two Weeks Course Gastro-Enterology starting October 3rd.

**SURGERY**—General Courses, One, Two, Three and Six Months; Two Weeks Intensive Course in Surgical Technique with Practice on living tissue; Clinical Courses; Special Courses. Courses start every Monday.

**GYNECOLOGY**—Two Weeks Course starting October 10th. Gynecological Pathology by Dr. Schiller starting October 24th.

**OBSTETRICS**—Two Weeks Intensive Course starting October 24th. Informal Course starting every week.

**FRACTURES & TRAUMATIC SURGERY**—Informal Course every week; Intensive Formal Course starting October 3rd.

**DERMATOLOGY & SYPHILOLOGY**—Two Weeks Special Course starting September 19th. Clinical Course starting every week.

**CYSTOSCOPY**—Ten Day Practical Course rotary every two weeks.

**GENERAL, INTENSIVE AND SPECIAL COURSE IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES EVERY WEEK.**

**TEACHING FACULTY**—ATTENDING STAFF OF  
COOK COUNTY HOSPITAL

Address: Registrar, 427 South Honore Street,  
Chicago, Illinois.



# Dilaudid hydrochloride

COUNCIL ACCEPTED

## For Relief of Pain

When an opiate is required Dilaudid acts more quickly and with fewer side effects. Dilaudid may be used orally, rectally or hypodermically.

Dilaudid hydrochloride (dihydromorphinone hydrochloride).  
Dilaudid Trade Mark reg. U. S. Pat. Off.



**BILHUBER-KNOLL CORP.** 154 OGDEN AVE., JERSEY CITY, N.J.

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

OCTOBER, 1938

Number 10

## HOARSENESS\*

Harold W. Powers, M. D.

Topeka, Kansas

The subject of hoarseness is so all inclusive, and offers such a realm of possibilities, that a complete review of the differential diagnosis is impossible in the scope of this paper. Yet, this symptom is one that is almost a daily occurrence in an otolaryngologist's practice and often, because it is so frequent and, because so many cases are of little consequence, I wonder if many of these patients are not neglected as to a complete and differential investigation into what is causing their symptoms. We are all, of course, more concerned with and try harder to determine what is causing a hoarseness that is of quite long duration. However too often, we may, in our haste, make a cursory examination. By this examination we may conclude the condition is a subacute or chronic laryngitis, and put the patient on voice rest and tell him to return in a week or ten days, if it is not better. It is true, some of these patients do return but, how many more or less accustom themselves to this slight huskiness of voice and, since they are having no pain, neglect to come back and later are seen with an inoperable carcinoma or some other chronic affliction of the larynx?

It is not the purpose of this paper to offer any new idea because the subject has been well covered by more competent authorities. But I do feel a review of the more frequent causes of hoarseness and the examination of the patient may act as a refresher and stimulate more careful scrutiny of these patients. We are more inclined to try to relieve someone in pain, but when they are quite comfortable, except for a slight huskiness of the voice, we might not feel so urged to take the complaint seriously. On the other hand, I can see the other side and realize that we can't give every patient with a hoarse voice the complete examination to be outlined. I do feel however, that anyone having this

symptom as long as four weeks should have a complete examination.

This symptom, in its true sense, should not be confused with other voice changes such as muffled, nasal or thick voice produced by nasal or pharyngeal conditions. We must always bear in mind that hoarseness is a symptom rather than a disease and indicates some disturbance of function of the vocal cords. Jackson has shown that for normal phonation we must have, (1) Good approximation of the cords, (2) tension and (3) vibration of the vocal cords. The interference with any one, or all, of these functions may be caused by local or general disease. As Jackson has pointed out, any patient presenting himself with the complaint of hoarseness should be considered as having a malignancy of the larynx, and then the diagnosis made by working back from that inference.

In taking the history of the patient, it is important to get all details as to his age, occupation, personal habits, that is, alcohol, tobacco, venereal disease etc. After this, in dealing with the complaint itself, consider first how long the patient has had the condition. This is important because, for example, if the condition has been present for many years, without much change, one can feel relatively certain it is not malignant. However, this does not lessen the seriousness of it, for even though it may not yet be malignant, it has possibilities of becoming so. Other factors to consider are pain, either on talking or swallowing, dyspnea, hemoptysis etc.

Clerf has pointed out that in taking a history, particularly in regard to age; if the patient is a child, one would think of papilloma or foreign body; early adult, of tuberculosis; and later life, of cancer. The list of causes of hoarseness is very long. Later we will consider some of the more common ones.

In examining the patient, we should establish a routine for each individual. First, a general inspection of the patient regarding his state of nutrition. Next in order should be a specific external inspection of the neck followed by palpation of the neck and larynx. Of course a general examination of

\*Read at the 79th Annual Session of The Kansas Medical Society in Wichita, May, 1938.



the nose and throat is indicated. If age permits, that is, if the patient is not too young, mirror examination of the larynx is in order. One must bear in mind that such examination of the larynx has its shortcomings and should be supplemented by direct laryngoscopy. The reason is due to the fact that in a good many patients the anterior commissure is not visible by the indirect method, and no examination is complete without seeing this. In addition to this, a careful examination of the ventricles can only be done by direct laryngoscopy. Quoting one of Jackson's axioms—"Death often lurks under an overhanging Epiglottis." Aside from these local examinations, a complete and thorough general examination including x-rays of the chest and neck, serology, blood examination and biopsy are imperative.

Naturally a rigid routine, such as just outlined, is not necessary to make the diagnosis in every case, but whenever there is doubt, if one follows this through to completion, one will rarely fail to make a diagnosis.

I think it is well now to pick out a few of the more common affections seen in the larynx and review their characteristics.

#### I—CARCINOMA OF THE LARYNX

Carcinoma of the larynx is a condition which we all have in mind when we examine a patient particularly in the cancer age. At times it is not easy to know, yet it is very important to make a definite diagnosis early. We must bear in mind that, although text books tell us certain lesions tend to appear in characteristic locations in the larynx, it is definitely possible for them to be out of the location where they are supposed to start. If we see a lesion in a larynx in a patient past forty, and especially if it is in the anterior portion of the larynx, we should be very suspicious of carcinoma. If the growth appears to be infiltrating the cord rather than merely attached to it, this gives us more convincing evidence of carcinoma. Any one sided inflammation or infiltration of a cord should suggest three things to rule out, namely, cancer, tuberculosis and syphilis.

There is one condition in regard to the diagnosis of malignancy which has been stressed by some, and that is impaired mobility of the affected cord. This, as St. Clair Thompson has pointed out, has led to confusion. It is a valuable sign if present, but is seen in a minority of the cases. When present, it does help distinguish between a malignant and benign growth.

Of course, here we are trying to diagnose an early condition. The limited lymphatic supply to the larynx, results in late metastasis. Consequently,

an early diagnosis of malignancy will, with proper treatment, result in a cure. Jackson has revealed the startling fact that eighty-two per cent of intrinsic cancer of the larynx is curable, whereas ninety per cent of the patients with cancer of the larynx die of the disease, showing that the disease has not been recognized in its early stages.

The ultimatum in arriving at a diagnosis, of course, is a biopsy, and this by all means should be done if there is the slightest suspicion. If we are not careful, we are too prone to say we will watch the progress of the growth. This is possibly permissible, but why wait, if we are that suspicious, why not find out immediately? Some may argue that taking a biopsy may stir up activity and allow metastasis, but as Jackson says, this is extremely unlikely and much less harm is done than by waiting until a growth becomes extrinsic.

#### II—TUBERCULOSIS

Tuberculosis is another quite common affliction of the larynx. As a rule, here, we usually can get a history of a pulmonary tuberculosis also. However, one must remember, even in quite advanced cases of tuberculosis of the larynx, the chest findings may be very slight and may require an x-ray to confirm them. Tuberculosis tends to start in the region of the posterior commissure. Consequently any tendency toward inter-arytenoid infiltration should make us suspicious, and further means used to determine any pulmonary pathology. The next most frequent site for tuberculosis to attack, is the arytenoids themselves; third, the vocal cords; fourth, ventricular bands and lastly, the epiglottis. Ulceration is most common on the cords and least frequently seen in the arytenoids. One thing that should lead us to suspect tuberculosis, is the striking anemia of the palate and larynx, sometimes even giving a waxy appearance to the whole area. If one cord alone is red or rounded, it should arouse suspicion. Frequently a streak of purulent sputum in the posterior commissure may be seen. Also one must remember that in tuberculosis or cancer, the symptom of pain on swallowing, or pain in the ears indicates a far advanced condition.

#### III—SYPHILIS OF THE LARYNX

Syphilis of the larynx is a third important disease to be considered in hoarseness. It is responsible for six per cent of all diseases of the larynx, so we see it plays an important role in our differential diagnosis. It occurs in the secondary or tertiary stages most frequently, and usually presents the most important differential difficulties in the last mentioned stage. In the secondary stage, it produces a hoarseness similar to that of an acute laryngitis, but

is not often accompanied by pain or the tickling cough and subjective annoyance that a true acute laryngitis gives rise to. The reason for this is that there is only hyperemia and congestion rather than active inflammation. On examining the larynx, we find a marked hyperemia of the cords and surrounding structures which may be associated with superficial ulceration.

In tertiary syphilis, one might be confused particularly between tuberculosis and cancer. Syphilis tends to attack parts other than the cords. Pain is late and not as severe as one would infer from the appearance of the larynx. When the lesion becomes extrinsic, it does become painful but not nearly as much as an equal amount of ulceration of a tuberculous character. The appearance of the ulceration, as seen by the laryngeal mirror, is deep crater-like ulcers with red margins. In the bed of these ulcers, the color is a dirty gray.

A diagnosis between syphilis, cancer and tuberculosis, of course, can not be positively made from the appearances, but a few points will give us a clue. First, in the ulcerative stage of syphilis, as compared to same stage of tuberculosis, there is quite a marked red appearance as compared to the marked pallor so characteristic of tuberculosis. Second, the early stage of the ulcer, in cancer, looks a great deal like syphilitic ulceration but it usually is not so red nor does it give the impression of melting away with such activity that syphilis gives.

#### IV—CHRONIC INFILTRATIVE LARYNGITIS

Chronic infiltrative laryngitis is another common cause of hoarseness which gives at times an appearance which may be confused with malignancy, tuberculosis or syphilis. The Wassermann, x-ray and biopsy will help rule out these. I want to emphasize what we already know about the inadvisability of using any irritating swabs such as silver nitrate, argyrol, etc. in the treatment of laryngitis, either acute or chronic. These are often the cause of bringing on a chronic laryngitis. This condition is usually due to chronic irritation from tobacco, alcohol or excessive voice use. In regard to tobacco, it has been pointed out by Jackson that, it is not the nicotine, but empyreumatic oil which is produced by distillation of the burning tobacco which causes the irritation to the mucosa. I mention this because, as you know, in a person who is a heavy smoker, it is next to impossible to get him to abandon the habit. The same author has devised a means of allowing the patient to have his cigarettes and yet not derive a great deal of harm from them. He is told that before lighting his cigarette, to mark off with a pencil, a distance from the distal end about the width of his

finger nail, and to smoke his cigarette to this mark and throw it away. By doing this he gets very little tobacco, and in leaving such a long remaining portion of the cigarette, this acts as a filter for the empyreumatic oil.

In connection with chronic infiltrative laryngitis, a few words should be said about pachydrimia. Here we have a hypertrophic thickening of the posterior ends of the vocal cords and the intervening tissue. This is a very common disease which is seen mostly in alcoholics or people who are very excessive smokers.

The laryngoscopic appearance is that of a pinkish or reddish mass which is continuous across the posterior commissure. The masses are symmetrical. No ulceration is visible. The remainder of the larynx may appear normal or may show slight evidence of chronic laryngitis. Perfect coaptation of the cords is interfered with by the mass in the posterior commissure. Palpation of the mass shows this to be a firm hypertrophy. The diagnosis is usually made from the appearances but may require a biopsy to be sure.

Of the benign growths which are commonly seen papillomata, fibromata, vocal nodules and polyps, the latter two, of which are really forms of fibroma, are the most common.

Papilloma are the most frequent of all benign growths. They occur at any age and are by far the most frequent growth seen in children. They characteristically attack the cords, the ventricular bands and parts below the cords and rarely are found in the inter-arytenoid region. They vary in size, but on an average are about the size of a split pea. They have an irregular warty appearance and do not ulcerate.

Fibroma is the second most frequent benign growth in the larynx. It is rarely seen before the age of ten years. It is usually seen on the upper surface of the middle or anterior portion of the vocal cord. They are rare on the ventricular bands or epiglottis. They have a grayish white, pink or dark red color. The surface is smooth. As a rule they occur singly and are sessile in their attachment.

In connection with fibroma, a word should be said about an acute condition which, if not treated properly at the time, will ultimately develop into a fibroma. Namely, this is a hematoma of the cord. I mention this to remind us not to depend on a hematoma absorbing but treat by incising the epithelial covering over it and evacuating the blood. If this is not done, organization with the development of a fibroma is almost certain to occur.

Vocal nodules always appear in the same location and always occur in pairs, that is, are on each cord



exactly opposite from each other. The location is at the junction of the middle and anterior one-third of the cord. They frequently appear with a small crater-like depression on one cord and, on the other, an apex which fits into it on phonation. They may be so small that they may be taken for tiny bubbles of secretion often seen on normal cords during phonation.

Myasthenia laryngitis is a very common disease of the larynx which is often overlooked as a cause of hoarseness. It is described, as its name implies, as a weakness of the laryngeal musculature, most frequently the thyro-arytenoideus muscle. It is frequently seen in singers and professional voice users, but of course can be seen in anyone, and often explains why some patients we see have a husky voice yet no evidence of inflammation or growths on the cords. Pathologically the condition is one of a prolonged myositis of the thyro-arytenoideus muscles. Clinically, the condition is characterized by a rather rapid giving out of the voice after any vocal effort. The time element may vary, depending on the severity of the condition. The voice may give out after only a half hour of voice use, whereas some may complain of its failing toward late afternoon of the days work. If voice effort is continued, the voice may be reduced to a whisper.

The condition is not difficult to diagnose if one keeps it in mind. The patient should be seen first when he is fresh and then later in the day and the appearance of the cords noted at each time. While the patient is rested the cords may approximate normally, but later, when seen, you will see that although the arytenoids come together normally, the cords will bow giving an ellipsoidal appearance to the membranous glottis and on watching them they will be seen to flap up and down on breathing. Also the ventricular bands will be seen to crowd over, seeming to make an effort to help close the glottis.

Another condition which we should always be on the look out for is, contact ulcer of the larynx. This is a condition which is frequently missed or mistaken for something else. No discussion of hoarseness should leave out this condition because it is more frequent than suspected. The ulceration is superficial and always located posteriorly in the larynx, usually on the vocal process of the arytenoid. It occurs as a result of a constant hammering together of the arytenoids in vocal abuse. Due to the trauma of the epithelium it allows a port of entry of infective agents thus baring the underlying cartilage. This in turn, becomes a greater traumatic agent. Often there is a piling up of granulation tissue in an ulcer on one side with a corresponding depression on the opposite side.

Indirect laryngeal examination will usually diagnose most of these. The location is characteristic. It is found in the region of the tip of the vocal process and is seen often as a yellow area over this tip. The edges of the ulcer as a rule are similar in color to the surrounding mucosa, rather than showing a great deal of thickening or redness.

One of the most diagnostic points in determining this type of ulcer is to palpate the ulcer with a dry cotton wrapped probe. The roughness of the necrotic point, even though tiny, can be felt to catch on the cotton. Whenever such an ulcer is examined and this is found, providing other causes are ruled out, this is a very diagnostic procedure.

As a rule it is not difficult to rule out other causes of ulcers. A tuberculosis ulcer is not limited to the area described and then the pallor of the mucous membrane and the inter-arytenoid infiltration are not found in contact ulcer.

Syphilis can be ruled out by Wassermann. From the appearances the syphilitic ulcer is larger and progressive whereas the contact ulcer remains small and in the same location. From malignancy it sometimes requires a biopsy but necrosis of the tip of the vocal process is characteristic of contact ulcer and it does not occur in cancer until so late that the appearances are unmistakably malignant.

Pachydermia differs in appearance in that in this condition, there is thickening between the arytenoids extending forward onto the posterior ends of the vocal cords.

Throughout this paper we have been considering growths in the membranous larynx which might cause hoarseness and have not mentioned paralysis of the cord. This is not difficult to diagnose, but I am mentioning it to remind us that before making a definite diagnosis of paralysis, be sure and rule out a fixation of the arytenoid. This can easily be done by laryngoscopy and by means of a forceps demonstrating that there is passive mobility in paralysis whereas the arytenoid cannot be moved in fixation.

One other point I want to bring out here in connection with paralysis of the cord, although it does not deal with the title of this paper, is bilateral recurrent paralysis. Occasionally this will result from a thyroidectomy and often the surgeon does not think he has cut either nerve because the patient can phonate clearly. The reason I mention this is to remind the surgeons that we get good phonation in a bilateral recurrent paralysis because the paralysis is abductor in type rather than adductor. The diagnostic symptom other than laryngeal appearances is the stridorous type of breathing in these cases.

In conclusion, I realize that a great many causes of hoarseness have been neglected in this discussion.

However, I have tried to pick out the more common ones that we are apt to see.

### BIBLIOGRAPHY

1. The Larynx and its Diseases—Chevalier Jackson and Chevalier L. Jackson.
2. Diseases of the Nose and Throat—St. Clair Thomson, 3rd Edition.
3. Treatment of Chronic Simple Laryngitis—Louis Clerf, Archives of Otolaryngology, Vol. 27, Number 3, Pages 261-265.

## PYOGENIC OSTEOMYELITIS OF THE PELVIS

### ANALYSIS AND DISCUSSION OF A SINGLE CASE

Robert C. Jeffries, M. D.

Atchison, Kansas

Pyogenic osteomyelitis of the pelvis is a relatively common and devastating disease. Its presence, with the problem of differential diagnosis encountered, is frequently a most difficult problem to meet. The treatment of the disease, once the diagnosis is made, continues as a direct challenge to one's preoperative surgical judgment. The teaching is common, that early diagnosis, immediate bony drainage to follow is essential. The emphasis placed upon this axiomatic principle is often the cause of negligence in making a careful evaluation of the surgical risk.

It is the feeling of the writer, that often early surgical intervention, is strongly contra-indicated, and in reality proves to have been done in actual error. It is well to remember that the lesion may not advance to a stage of suppuration, and that spontaneous healing may occur.

Kulowski<sup>1</sup>, in an analysis of ninety cases of osteomyelitis of the pelvis, has given us a good precedent of principles to follow. He has expressed himself thuswise: "Until contradictory knowledge affecting the relationship between the port of bacterial entry, the systemic infection and the local lesion is attained, adequate drainage is indicated only, when localization is clinically established. Pyogenic osteomyelitis anywhere is not a surgical problem until this occurs." The case I am pleased to report, may be seen to lend considerable support to such a contention.

### REPORT OF A CASE

Peter J., a white boy aged thirteen years, was admitted to the hospital on February 24, 1938, with symptoms of six days duration. The onset of the condition was sudden, although he had complained of fatigue, and slight temperature, during the previous two months. The initial complaints were headache, fever and a dull aching of the perineum,

extending from the rectum mesially along the thigh. During the second day of his illness, he complained of pain above the left knee, and soon developed a slight redness of the skin anteriorly above the distal end of the left femur.

Considerable brawny induration was present along the mesial aspect of the left thigh, with considerable tenderness of the musculature of the thigh extending to the knee. There was no tenderness over the ischial tuberosities, to rectal examination at this time. The temperature remained at 102 to 103 degrees throughout the day. Moderate swelling and tenderness were noted over the femur just above the patella superior and anteriorly. The temperature remained rather constant during the next three days, becoming more fluctuant during the sixth day of the illness. By the morning of the ninth day, for the first time definite fluctuation appeared above the knee. Rectal examination at this time in the hospital also revealed considerable tenderness in the locality of the left ischium. X-ray negatives, showed no bone pathology in either locality. The white cell count was 10,400. General hygienic measures and skin traction to the left leg were continued. With Dr. Jacob Kulowski, in consultation, a tentative diagnosis of pyogenic osteomyelitis of the distal end of the left femur, with a simultaneous foci of infection occurring in the left ischium, was made. The aspirating needle, on the morning of the tenth day confirmed the previous diagnosis, with the finding of pus in both localities. The white blood count made that morning was 10,600; the blood culture at the close of a seventy-two hour period was negative. The operative procedure employed was simple adequate drainage, with the evacuation of pus from the pelvis and from a small abscess cavity above the knee. Several small blood transfusions were given, followed by marked improvement in the child's general condition. The temperature, the morning of the eleventh day fell rather suddenly by crisis. He had remained temperature free for more than a week, with profuse drainage from both operative incisions. The highest white count recorded was one obtained at the end of the second week, that being 13,200 cells. X-ray negatives taken at the close of the third week's illness, show no bony sequestra. The child, nine months following the initial onset of his illness, has remained perfectly well. There has been no sequestration of bone, and his general physical condition is excellent. To date there being no subsequent foci of infection.

### SUMMARY AND CONCLUSIONS

Pelvic osteomyelitis may either be a direct or hematogenous infection. In general, the onset of the disease determines whether the local or the systemic



reaction will dominate the early stages of the infection. The therapy involved in the primary control of the disease, should be so directed as to care for the initial systemic infection. This done, one may "with watchful expectancy": watch for localizing skeletal signs. If a patient is to live for only a few days with a sepsis, there is no operative procedure taken early, that will better the condition. Skeletal localization, with the forming of pus, is the earliest criterion for operation, even though occurring late in the course of the disease, and if done at this time the diagnosis is more certain, and the operative risk is less.

This single case is unusual because of the occurrence of two foci of infection localizing simultaneously. Good surgical drainage was secured, with the bone left intact. Sequestration is the expectation, but has not occurred at the close of the third week of the illness.

#### BIBLIOGRAPHY

1. Kulowski, Jacob, M. D., F.A.C.S., St. Joseph, Missouri.

## ESSENTIAL HYPERTENSION AND CARDIO-VASCULAR DISEASE

Aaron Arkin, M. D.\*

Chicago, Illinois

Essential hypertension is a cerebral functional disorder affecting the vasomotor apparatus, and is characterized by an hypertonus of the arterial system. This hypertonus leads to a progressive rise in the systolic and diastolic blood pressure, followed by cardiac hypertrophy, and cerebral, renal, retinal and other vascular changes. The disease often continues for years without producing subjective symptoms, and is frequently diagnosed at a late stage when cerebral, cardiac, renal, or, ocular symptoms appear.

I divide the disease into two stages (1) the early, psychic, functional, or benign stage when the blood pressure varies, largely with the mental state, and (2) the late advanced or organic stage, with secondary changes in various organs.

The diagnosis in the early stage can be made by finding an increased tonicity of the arteries, with a variable hypertension, spastic retinal arteries with tortuous venules, and beginning cardiac hypertrophy. The advanced stage is recognized by the more or less fixed high systolic and diastolic blood pressure,

rigid arteries, marked cardiac enlargement, hypertensive retinitis, and eventually signs and symptoms of cerebral, cardiac, or renal disease.

In making a diagnosis of essential arterial hypertension other causes of hypertension must be excluded, such as (1) glomerular nephritis, (2) polycystic kidneys, (3) urinary obstruction, (4) increased intracranial tension (5) eclampsia, (6) adrenal tumors (medullary or cortical), (7) pituitary basophilic adenoma, (8) lead intoxication, (9) coarctation of the aorta, etc. About fifteen per cent of all adults have essential hypertension.

In about ten per cent of cases of hypertension, usually in young adults, the disease runs a more acute rapidly fatal course. This is due to extensive renal arteriolar changes which lead to extremely high blood pressures and death from renal decompensation with uremia, less often acute cardiac failure, or cerebral hemorrhage. Retinal hemorrhages and papilledema often mark the onset of this form.

#### THE NATURE OF ESSENTIAL HYPERTENSION

The cause of primary arterial hypertension has not yet been discovered, in spite of extensive clinical, experimental, and anatomical studies. The endocrine glands have been blamed. Others have sought pressor substances in the blood of hypertensives, but without success. A specific pressor substance has not been found. The recent work of Goldblatt and others is very interesting. They have for the first time regularly produced essential hypertension in dogs by constriction of the renal arteries. Perhaps the anoxemic kidney produces some substance which circulates in the blood stream and causes the hypertension.

Hypertension is a symptom of the hypertonus of the systemic arteries. Without an increased tonicity of the arterial and arteriolar walls there can be no high blood pressure in essential hypertension. When the hypertonus becomes persistent and leads to a marked hypertension with arterial constriction the heart, brain, kidneys, eyes and other organs suffer organic changes. There is an increased susceptibility of the arterial walls to spasms. These angiospastic crises cause further circulatory disturbance. The increased blood pressure leads to secondary changes in the arteries with atherosclerosis.

Essential hypertension often commences in young adults with an hereditary predisposition. The most important factor seems to be the psychic influence. The patients are neurotic and temperamental, often easily upset. They complain of migraine headaches, vertigo, irritability. Some have palpitation, especially when lying on the left side. Blood pressure readings will show marked variations in the systolic

\*Associate Professor of Medicine, Rush Medical College of University of Chicago, Professor and Chairman, Department of Medicine Cook County Graduate School of Medicine, Attending Physician, Cook County and Mt. Sinai Hospitals.

and diastolic pressure. We consider a systolic above one hundred and fifty mm. and a diastolic above ninety-five to be an hypertension. In severe cases of malignant nephrosclerosis we often see systolic pressures above two hundred and fifty mm. and diastolic above one hundred and sixty mm.

In essential hypertension there is an increased peripheral resistance which must be overcome to maintain an adequate circulation. The resistance causes a rise in the diastolic pressure. As long as the heart can increase its force and maintain an adequate pulse pressure the patient may suffer few or no symptoms. When the heart begins to fail there is a drop in the systolic pressure, which means the pulse pressure is lowered. As long as the hypertrophied heart can maintain a pulse pressure approximately one half as great as the elevated diastolic pressure a fairly adequate circulation is maintained.

### THE HEART IN ESSENTIAL HYPERTENSION

In essential hypertension there is a progressive increase in the tonus of the arteries and arterioles, which produces a swelling of the wall with constriction of the lumen. At first this process is reversible, but later the walls become permanently thickened and the lumen narrowed. The heart muscle undergoes an hypertrophy from the increased work, and perhaps also from an increased tonus of its musculature. There is thickening and shortening of the muscle fibers. This hypertrophy, which is so essential in overcoming the increased peripheral resistance, also leads to eventual cardiac decompensation unless the patient succumbs to a cerebral hemorrhage or renal failure. The heart often performs the increased work for ten, twenty or more years before the symptoms of decompensation appear. During all this time the person may not be aware of the hypertension unless the blood pressure is taken, or the eyes are examined.

Essential hypertension is one of the chief causes of cardiac failure, and sixty-five per cent of hypertensives die of heart disease. Today one fourth of all deaths in people above the age of fifty years are due to hypertensive heart disease. The marked myocardial hypertrophy (the heart may weigh 600 to 1000 grams) leads to insufficiency of the coronary blood supply. The muscle cells often increase to two or three times their former thickness, and suffer from relative anoxemia which causes their degeneration and fibrosis. This explains the cardiac failure in some hypertensives with little or no coronary sclerosis at necropsy. Many, of course, develop marked sclerosis or thrombosis of the coronary arteries.

### THE BRAIN IN ESSENTIAL HYPERTENSION

One fourth of all persons with essential hypertension die of cerebral disease, chiefly hemorrhage or encephalomalacia. Here also arterial spasm often occurs. Such spasms or vascular crises may lead to necrosis and softening. That cerebral vascular spasms are frequent is indicated by the many transient cerebral symptoms. I have often observed paresthesias, motor aphasia, monoplegia, and hemiplegia, epileptiform seizures, severe migraine headaches, vertigo, and amaurosis. These may appear and disappear. Some of these symptoms may be mistaken for those of brain tumor or hemorrhage. In some of these patients there is an increased pressure of the cerebrospinal fluid, with some relief from spinal puncture. These cerebral manifestations may be premonitory symptoms of more serious brain involvement.

Cerebral hemorrhage and thrombosis are the most frequent cause of death in the cerebral type of essential hypertension. A sudden severe headache or vomiting at the onset is strongly in favor of the diagnosis of hemorrhage. Unconsciousness or coma develops in three-fourths of the cases. A bloody spinal fluid, stiffness of the neck, a high leukocyte count, blood pressures of two hundred or above, loss of pupil reflexes, dilation of one pupil, and positive Babinski sign are the usual findings in cases of cerebral hemorrhage.

### THE THERAPY OF ESSENTIAL HYPERTENSION

The great variety of therapeutic agents recommended for essential hypertension is the best proof of the unsatisfactory results obtained with most of them. As we cannot cure this disease (by cure I mean a return of the tonus of the arterial walls to normal, with normal blood pressure, heart, kidneys, and fundi) the best result obtainable is to stop the progress of the disease.

Much can be done by proper training and conduct to prevent an unfavorable outcome. These patients are hypersensitive to various stimuli and irritants which lead to increased vascular tonus. They are very susceptible to psychic influences. Hence psychic therapy is most important. These individuals require mental rest and reduced physical activity. The benefit of most therapeutic agencies is largely suggestive.

The patient should not become the victim of costly and often worthless medication. We have at present no drug which will bring the condition of the contractile tissue of the arterial system back to a normal physiologic state. We have already noted



that the cardiac hypertrophy is compensatory and necessary in overcoming the increased peripheral resistance and stasis.

There are two means of reducing the blood pressure, namely, by action on the arteries and arterioles, and by action on the heart. Any agent which affects only one may endanger the functional capacity of the other. The ideal drug should affect both, and gradually not suddenly.

Of the drugs sedatives act best by influencing the vasomotor centers and lowering vascular tonus. The vasodilators are indicated in angina pectoris, cerebral vascular spasms, cardiac asthma, and marked rises of blood pressure. We have amyl nitrite, nitroglycerine, erythrol tetranitrate, sodium nitrite and others. Pal advises papaverine and its derivatives for the vascular spasms. The xanthin compounds are of value, as they act on the coronary, cerebral, and renal vessels. As a rule they do not cause much drop in blood pressure. Caffeine, theobromine, theophylline, diuretin, theominal, and aminophyllin are most popular. When the blood pressure is fixed around one hundred and eighty systolic and one hundred and twenty diastolic no attempt should be made to lower it. A reduction is often harmful rather than beneficial. I have observed patients for ten to twenty years with such blood pressures.

The diet should be sufficient to maintain the weight at a normal level. A mixed diet of fifteen hundred to two thousand calories is enough. Albumin, purine foods, and salt should be restricted. Fluids should be limited to an average of fifteen hundred c.c. daily. There is no evidence that a moderate protein diet has any harmful effect in essential hypertension.

Careful exercise is beneficial for the lazy or obese hypertensive. Proper exercise produces a more economical metabolism and tends to lower the blood pressure, especially in obesity and diabetes. Walking, riding, and golf are most suitable. Baths of thirty-five degrees to forty degrees C. reduce blood pressure, those over forty degrees C. raise the pressure. Lukewarm baths are best. Warm foot baths are useful in cerebral congestion. A warm climate and moderate altitude are most favorable.

In the last few years attempts have been made to treat this disease by surgical as well as medical means. Two operations, among many that have been tried, may be of some value. They are (1) resection of the anterior spinal nerve roots, and (2) resection of the splanchnic nerves and lower thoracic ganglions. I consider these operations still in the experimental stage, and the results have not been as good as was expected. The operations are too dangerous in the advanced or fixed stage of hypertension, in cases with definite cardiac, cerebral or

renal damage. In the more benign psychic stage perhaps the trauma of operation, long preliminary and post-operative bed rest, are the chief factors in the lowering of the blood pressure. It seems to me unwise to denervate large vascular areas when there is no proof that the nervous impulses are abnormal.

Finally, a restful regime with reduced physical and mental strain, plenty of rest periods, and at least ten hours of sleep, is the best remedy. Bromides, amytal, or other sedatives may be needed from time to time. Many of these patients with hypertension live a useful life for decades. Attempts to lower the blood pressure except in vascular crises may be more harmful than beneficial by reducing the blood supply to the vital organs.

---

## DIAGNOSTIC ERRORS IN THE FIELD OF INTERNAL MEDICINE\*

J. M. Porter, M. D.

Concordia, Kansas

This paper makes no pretense of reviewing the subject of differential diagnosis, but only attempts to point out some of the pitfalls of diagnosis in hopes they may be avoided. A paper along this line has seemed for some time to be worthwhile to me but the dilemma presented itself of either making the writer out a self-confessed failure or a braggart who was always right after the other man was proved wrong. We all know of the other man's mistakes and those of us who have seasoned at all, know that he knows of our mistakes. Accordingly, I have borrowed from President Roosevelt, a "passion for anonymity" and shall make no attempt in the following cases to indicate who was right and who was wrong. In trying to select the interesting and the instructive I am bound to step on the toes of the specialties somewhat. I intend to confine myself to internal medicine but internal medicine in a town of 6000 as I practice it is not the internal medicine of a medical center. Furthermore, one point I hope to develop is the fact that a man restricted too rigidly to one field is not rendering his best services. I would no more attempt to treat a case of glaucoma than I would a brain tumor. But I am sure what little I know of both these conditions helps me in my broadly interpreted internal medicine. These points I shall bring out later.

In the first problem to be considered, I refuse to

\* Presented before the Shawnee County Medical Society April 4, 1938 and before the Sedgwick County Medical Society, April 5, 1938.

be anonymous. I feel too strongly about this one situation to be impartial. The problem I have in mind is best illustrated by the following case. Several years ago, a fifteen year old boy returned to his home in western Kansas from some sort of excursion to Kansas City and played basketball that night. He attended school the next day, then roller skated and went to a cousin's to stay all night. Sometime during the night he became sick and vomited. The next day his temperature reached 108 degrees, purple spots broke out on his body and he lay in partial opisthotonos. By ten that night he was dead, less than twenty-four hours after he had been roller skating. The doctor who cared for him said this was the worst case of "flu" he had ever seen, signed the death certificate as influenza and was allowing plans for the funeral to proceed. At an autopsy the day after death, diplococci were demonstrated in the bloody fluid from the base of the brain.

Anyone who reads this probably recognizes it without the bacteriological report as a fulminating cerebro-spinal fever. You may say this is an isolated instance and of no importance. I admit this is probably the grossest error I have ever seen covered by the ubiquitous term "flu" but I insist it is typical of a real problem in American medicine. The easy term "flu" has ruined the fine art of diagnosis in a large part of the country. My patients all date their illnesses from "flu", the consultants always say the condition started as "flu", everything except broken legs and pregnancy is passed off as the "flu" until the empyema, the bulging ear drums, the loss of weight, edema or what not forces itself on someone's attention. Even then, these conditions are considered "complications of the flu". A year ago clumps of pus were demonstrated and *B. Coli* grown from the urine of a two and one-half year old boy who had been suffering from headaches, chills, and paroxysms of fever for over a month. On small doses of aspirin and a mandelic acid preparation he improved rapidly and in a week was well and remained so. His home town doctor responding to a letter with this data outlined, wrote back saying it was certainly a "peculiar quirk of the flu".

Influenza for a few years after the 1918 pandemic meant a real entity or at least something comparable to the gripe we used to have prior to the war. As long as it held this restricted field, no great harm was done. More recently however, flu has spread to include any and all parts of the body. For a time I knew that when a patient told me he was having "intestinal flu" (which seems to me like pneumonia of the kidney) he was suffering from diarrhea and I was no more handicapped than if he had insisted he had dysentery, cholera

morbus, or any of the other terms which the laity thinks a little more proper than to say the bowels are loose. (I have always admired the Englishman who named Indian Hill Diarrhea "Simla trot" for I imagine the sanitary conveniences of northern India about parallel those of western Kansas.) Later, however, I discovered "intestinal flu" had come to mean also constipation. Still later, patients with only abdominal pain or cramping would complain of intestinal flu. By then, naturally, the term had lost all significance. And yet it is still used to describe any or all of these varying conditions. I saw a woman of twenty-eight in 1932, with typical hysterical vomiting which stopped almost overnight when she was put in the hospital and her friends and family kept away from her. She came to the hospital with a diagnosis of intestinal flu. Another patient in 1934 had a recurrent phlebitis which had previously been called flu. To finish this problem, whose importance I may have overestimated, I would like to say that I envy those men who never worry over the possibilities of undulant fever, secondary syphilis or peri-nephritic abscess and merely say the patient has flu. So often the patient gets well anyway.

Associated with this problem of the upper respiratory tract in another question for which I do not pretend to have an answer. This is acute catarrhal jaundice. I learned from Osler's text<sup>1</sup> and my instructors that catarrhal jaundice was a simple affair occurring in young adults, rarely coming in epidemics and totally unassociated with the respiratory tract. In a normal year I see one or two isolated cases which fit this text-book picture. In the winter of 1933-1934, north central Kansas had a totally different disease. On one occasion I had three individuals involved in one family, a druggist of twenty-eight, his wife of twenty-six at term in her second pregnancy and her mother, a woman of fifty who was staying at the house while the daughter was in the hospital. The man and his mother-in-law developed jaundice about the time the wife was well. Several other cases reported brothers or sisters involved at about the time the original case recovered. In a period of approximately four months I saw as much catarrhal jaundice as I ordinarily see in five years. The laboratories may have something to offer in complete understanding of these cases but fortunately for the patients and unfortunately for scientific advance, these patients are never sick enough to require hospitalization and consequently few thorough studies are made. Reports on similar outbreaks differ as to etiology, some reporting no causative agent and others a variety of factors<sup>2</sup>.

We are all familiar, of course, with jaundice com-



plicating pneumonia and other severe toxemias. In 1937, however, I had a simple jaundice lasting six weeks coming on in a twenty-nine year old woman at the height of a rather mild scarlet fever attack. Ever since 1933 it has become necessary to be familiar with cases of which the following is typical. A schoolboy of thirteen was seen January 14 with a fever of 102 degrees, aching, headache and a red throat although the tonsils had been removed. A week later these respiratory symptoms were better but definite jaundice was present. January 25, eleven days after the onset, he was practically well. Lansing, Kansas, experienced a similar epidemic in 1937<sup>3</sup>. Is this a new entity? Is it the old catarrhal jaundice following something which might be called "flu"? Is a streptococcus responsible, as the scarlet fever case would suggest? Has it any relation to the more severe epidemic jaundice called Weil's disease and due at times to a spirochete? I am unable to answer these questions and hope some more competent observer will settle the question.

Having posed this problem for someone to answer, I will return to the point of mistakes in diagnosis. I have always felt that a good history was secondary to nothing else in arriving at a diagnosis. Without a history, we would be no better than the veterinarian (or for that matter the pediatrician) who must depend on the owner's description of the illness and from there on his own powers of observation. I would prefer to have my patient tell me something of his illness, even though that history is not reliable. In 1932 I became quite interested in a woman of sixty-two with complaints of abdominal pain and hematuria when she told me that six years previously she had had a tumor removed from her abdomen whose "roots" went deep into her sides and which was surrounded by gangrene at the umbilicus. I lost interest when the hospital reported she had had an umbilical hernia repaired. This of course, was mere stupidity on her part.

Another case I treated at home and in the office for almost a month because of pain in the back and dysuria, with increasing amounts of pus in the urine before I got him away from his wife, inspected the urinary meatus and found pus containing diplococci. This patient was also probably stupid to mislead me but he was in more fear of his wife than of the gonococcus. Another instance in which the unreliable history misleads is in the case of induced abortions. The patient, whether she has done the job herself or is protecting some quack by lying, believes as long as she is flowing that her problem is largely solved and hence wants treatment only for the cramping, the fever or whatever outside symptoms she has. I had one divorced woman of twenty-one

whom I saw with a temperature of 103 degrees and a pulse of 120 tell me cheerfully that her menstrual periods had been regular up to the day before when her flow had stopped as she was washing her hair. Dilatation and curettage later disclosed a wide open cervix and a dead two or three months fetus. I am a trusting sort of person and usually believe my patients and I think I have been mislead oftener by this form of dishonesty in acute infections than any other.

The honest but careless patient will also lead us astray occasionally. A short time ago I had an intelligent man of twenty-nine in the office more annoyed than worried by a scant urethral discharge present for about a week. As the infection proved to be non-specific I treated him with silver with the assurance that it would probably subside. A few days later he was back unimproved and remembering this time to report that his wife had had treatment for a trichomonas infection some time before. I was able to demonstrate the trichomonads in fresh saline and changed my line of treatment and my cheerful prognosis. In spite of these failures, I still depend largely on my patient to tell me what is wrong. I have in mind the twenty-three year old student who told her family medical adviser she thought her heart was on the right side because of palpitation there with excitement or exertion. He "pooh-poohed" her idea until he listened and then sent her for an electrocardiogram which showed a true right-sided heart and apparently complete situs inversus.

Another patient at the age of seventy-one complained of mild dyspnea after fixing his basement furnace and returning upstairs. He was warned of impending myocardial failure but an electrocardiogram was reported normal and about that time x-ray changes in his lungs were interpreted as malignancy and it was a year later that he came home with the diagnosis of heart disease and gradually developed congestive failure from which he died. There was nothing to hear in this seventy year old heart but the history was the real clue.

Another diagnostic problem on which we are liable to trip is the one of poisons and irritants. In spite of the high mortality in detective books, most of us can practice a lifetime without seeing a case of homicidal poisoning. Accidental cases are a different matter. The element of the unexpected is the dangerous part of this problem. I once treated a man and his wife of about thirty and two children three and five for acute carbon monoxide poisoning coming on after sleeping in a poorly ventilated house with a gas heater going all night. This sounds simple enough and may be compared to the usual winter run of poisonings from cabin camps we

are all liable to see. However, the history ran as follows. The family all arose as usual and ate breakfast, the children running and playing normally. The three year old complained of abdominal pains, vomited and collapsed at the table. It was at this point I was called but by the time I got there, the five year old had vomited and collapsed on his way to the toilet to move his bowels. Before I could decide what had upset the children or any more than look at them, the mother who had been well on my arrival developed vertigo, headache and nausea. I began to see the light by this time and got the windows open and took the husband out into the air where he suddenly began vomiting and developed a headache. The children gave every indication of ingesting some quick-acting poison at breakfast and did not mention headache or anything else to suggest carbon monoxide. It was only when the adults began with more typical symptoms that the cause was clear.

Another local irritant which has never been concealed from me by the patient but which could easily lead to mistaken ideas and treatment is something I have never seen mentioned in the literature. That is the use of solid potassium permanganate in the vagina for the purpose of inducing abortion. (A British report in 1936 mentions abortion after the use of concentrated solutions of permanganate.)<sup>4</sup> This practice may be purely local custom in my part of the country but its prevalence should be noted and some warning or restrictions on its sale instituted. My first case in 1930 was a fifteen year old girl who was not even pregnant but because of exposure introduced two-five grain tablets into the vagina after a cleansing douche. She set up severe and nearly fatal bleeding from erosion of an artery. The next (1932) was a divorced woman of twenty-eight who used the same amount and had only mild vaginal bleeding possibly because of more mature tissues or because she did not clean out the normal mucous as thoroughly as the first patient. The next girl in 1932 was twenty-five and married and was practically well by the time I saw her a week later. It was not clear in either of these cases whether pregnancy existed or if so whether it was interrupted. It is not likely there would be any influence on pregnancy unless the drug were placed well within the cervical canal. Following this "epidemic" I warned all the local druggists and got word to the bootlegger who was advising this "safe" treatment and I saw no more for a time. In 1936 a single girl of twenty and in February 1938 a married woman of twenty-four, both definitely pregnant used the drug and neither one aborted. Both recovered, the first after severe hemorrhage and the

second after much ulceration of the labia and cervical vaults. The difficulty in handling cases involving this poison comes in the continued corrosive action of the drug as it stays in the vaginal folds more or less dry and starts irritation only as it dissolves in the secretions.

Another drug intoxication which is only a variety of a well-known proprietary addiction is worth mentioning because it brings out a point I think worthy of interest in diagnosis. That is the utilization of new studies and methods appearing constantly in the literature. As medical journals stand at present it is all most of us can do to cover our favorite periodicals vaguely and hope we do not overlook anything of importance. New drugs, new diagnostic procedures, new conceptions of old problems appear in such confusion no one can hope to keep up with them. Since I avoid bromides in medication almost altogether, I would have missed the importance of an excellent study of chronic bromide intoxication appearing in the *Journal of the American Medical Association* May 4, 1934<sup>5</sup> if I had not had a case of this sort slip by me a short time before. October 21, 1933, I saw a fifty year old professional man complaining of a head cold and lassitude. He had been markedly overworked, was somewhat depressed over certain factors with which I was familiar and when I found him in bed with a normal temperature I was not alarmed. He was a periodic alcoholic and in spite of my advice used many proprietary headache remedies with the usual poor color and acne of those drug addicts. He did not respond to treatment and grew steadily worse with headaches; fever, delirium and confusion. He finally recovered after a long period at Excelsior Springs and abstinence from coal tars. I had always considered the acetanilid responsible for the deleterious effects of this combination except for such mild bromide signs as acne. I look differently on the preparation now and am more than ever convinced its unrestricted sale should be prohibited.

Another instance of failing to keep up with developments in my own case was in regard to primary hypochromic anemia. It seems to me every time I open a medical journal someone has a new classification of the anemias and I accordingly became rather bored with these studies years ago. However, about 1935 Dr. Maurice Snyder, Salina, gave an excellent review at the Golden Belt Medical Society of the diagnosis and treatment of this particular type of anemia, emphasizing the spooned nails and the "banana cells" in the blood smear. (This was later printed in the *Journal of the Kansas Medical Society*.)<sup>6</sup> I was accordingly able to put a patient of mine on a cheaper iron preparation, stop my efforts



to prove her hypothyroid and give up my hope of keeping her blood up without iron. On looking over my original notes of 1934 I found it recorded that she had brittle nails and the smear showed oddly shaped cells. She had drifted from doctor to doctor previously, always improving on hematinics but always failing again without them. If I had continued without this newer knowledge of her permanent need for iron, I am sure she would have drifted away from me. Since then I have seen several similar cases.

I have promised to intrude somewhat on the fields of the various specialists and I believe the specialty of dermatology is a good place to begin. There is one so-called skin disease that I consider a general infection and which is not even mentioned in most medical books, and yet which is seen by the general man or the internist long before the dermatologist is consulted. This is erythema nodosum. I see a case of this every year or two and am invariably called because of the rheumatic symptoms at the onset, the fever, aching and pain, rather than the skin manifestations which usually come later. On occasion I have been misled at the onset and treated the condition as an arthritis.

I have already mentioned glaucoma as being outside the field of internal medicine but of importance in diagnosis and I want to give two instances of this. One was a woman of forty-five who was being treated for sore throat and diarrhea at her country home in 1932. At that time she complained only of a little photophobia. Two days later she phoned of an inflamed eye and reported she had had iritis in the past. She was immediately referred to an ophthalmologist who made a diagnosis of acute glaucoma, finding a tension of sixty-five which responded well to treatment. I have a healthy fear of glaucoma and believe the sooner I can recognize or suspect it, the better service I am rendering my patients. At another time I suspected chronic glaucoma on the basis of failing vision over a period of years in spite of glasses from a competent eye man in a patient of fifty who came to me periodically for routine examinations. He now has good vision, due, I think, to my stepping completely out of my field and insisting on investigation of the eyes. My contribution here was not my knowledge of ophthalmology but a recognition of the responsibility involved in periodic health examinations.

The venereal diseases affect the work of all of us and of course are being greatly emphasized at present. The following case, I think, shows how many instances of latent syphilis can be overlooked not thru ignorance or carelessness but thru the exigencies of practice as we find it. I first saw Mrs.

B. at the age of forty-seven when I was called to the hospital after she had shot a .22 rifle thru her hand while cleaning it. I administered tetanus antitoxin and referred her to a surgeon under whom she made a good recovery. Three weeks later I saw her in the country with chills, a temperature of 102 degrees, abdominal cramps and pus in her urine. Because of roads drifted with snow, I was forced to treat her by telephone until ten days later when we got her to the hospital and opened a pelvic abscess apparently due to an old gonorrhea. Nothing in the history suggested syphilis and as an urgent operation the drainage was done without taking a Wassermann. Two months later she made the diagnosis for us by developing a paralysis of one of her ocular muscles. The Wassermann was four plus and she recovered on potassium iodide.

I studied syphilis once for two or three weeks under a very capable man who dismissed me with these words, "I don't expect you to know syphilis after this short a time, but I do hope I have given you enough experience to make you think of it once in awhile". If all of us could keep this attitude many old syphilitics would be benefitted. I have in mind a man of forty-seven who recently admitted primary syphilis with inadequate treatment eleven years previously and yet who had been receiving treatment for a knee which painlessly discharged pus for a year following an injury. He was well on iodides in a few weeks but later developed a subclavian aneurism. This is simply a matter of keeping the disease in mind. His physician knew him, or thought he did, knew of the injury to the knee but not the old infection, and for a year handled him inadequately. Another point I think is not well enough emphasized is the possibility of acquiring syphilis and gonorrhea at the same time. I have seen old cases of this sort which trace their neglect of the lues to the more evident gonorrhea and two or three times I have seen the onset of the combination myself. In one case, as city physician I had to free the city hall from a quarantine for small pox imposed by a physician who had been treating a transient for gonorrhea while he slept in the city jail. Although he had been there over a month with no small pox in the country, when a skin rash and fever appeared his physician insisted it was small pox. The mucous patches and general appearance of the skin were backed up by a positive Wassermann and the firemen and police released from quarantine.

I have one problem in internal medicine that I think will interest the medical and surgical men alike. This is the confusion which so often arises between pernicious anemia and abdominal conditions leading to jaundice. Theoretically, we should

always be able to distinguish these by our laboratory tests on the serum, the blood smears, etc., but unfortunately confusion occurs and neglect or damage results. I saw Mrs. H. at the age of sixty-three in 1934 after she had had treatment for indigestion for years, with spells of pain, bloating, emesis, etc. The gall bladder including some stones had been removed in 1927 without lasting relief. She had been x-rayed numerous times and refused further studies. Accordingly, while I suspected malignancy, I gave her what relief I could thru diet, bile salts by mouth, etc. I did not see her for three years until she returned home ready to die and came to me only for what help I could give her in her final days. She had lost weight, strength and color, her voice was husky, she was dyspneic, orthopneic and edematous in spite of digitalis and showed a definite lemon yellow pallor. Her hemoglobin was thirty-six per cent and her red blood count 1,600,000. She improved rapidly on liver and instead of going to the cemetery, went to California for the winter. She nearly died, however, before the proper diagnosis was made in spite of supposedly adequate medical attention from several men including myself.

Another case was similar. The patient was a farm woman of fifty-five who had her gall bladder removed and the rest folded over in the manner of an itinerant surgeon well known in our territory some five years previously. When I saw her she was jaundiced, had a temperature of 101 degrees and complained only of pain between her scapulae. The gall bladder was normal by x-ray but the hemoglobin turned out to be forty per cent and the red count slightly under one million. She then admitted sore tongue and parasthesias. She has done well ever since whenever she gets adequate liver and the gall bladder has given no more trouble.

Several myths, I believe, should be exploded in the field of cardiology. First of these is the idea of an athletic heart. The second is the conception that a systolic murmur unsupported by other findings indicates heart disease. The third is that effort syndrome, premature contractions in young people, simple sinus tachycardia and findings of the like necessarily indicate cardiac pathology. The case of pernicious anemia with congestive failure described above is a typical mistake on the basis of a murmur alone. Another is a woman of fifty-eight who complained in 1936 of being all tired out, having some dyspnea and cough and swelling of the feet. After her dentist had reassured her about some lumps in her neck, telling her apparently they were lipomata, she was treated with digitalis for leakage of the heart. Her heart did show a systolic murmur but she had large firm lymph nodes in all parts of her

body, a red count of 3,000,000 and a white count of 696,000. She died in spite of x-ray therapy but the diagnosis might just as well have been correct from the start.

We all see children and young adults restricted in activities, barred from athletics and warned against pregnancies because of supposed athletic hearts or simple systolic murmurs many of which disappear on exercise. Older patients with everything from infected teeth to a psychoneurosis are also frightened half to death by the diagnosis of "flu heart" on the basis of mild toxic myocarditis, by gas crowding the heart, by simple palpitation and the like.

A different problem is that of sorting out the functional and psychic elements in the case of real cardiac pathology. It seems to me this is more difficult in cases of paroxysmal tachycardia than anywhere else. The hearts in these cases are fundamentally normal, only the rate-controlling mechanism being involved in most instances. I have one worth reporting in detail. The patient is a graduate nurse six feet one inch in height and because of this leads a somewhat restricted life particularly as regards male companionship. She is now thirty-three and has had tachycardia with sudden onset and offset since the age of twelve. This has been much more frequent since the age of thirty but is complicated by her nervousness and a simple tachycardia coming on with any nervous disturbance. For years she was treated as a neurotic, as a hyperthyroid, with antuitrin-S, etc. Until I had watched her for the better part of a year I was unable to determine whether she was merely neurotic or had real paroxysmal tachycardia. She would describe typical attacks but when seen had only a simple sinus tachycardia. The electrocardiogram was normal. I then caught her on successive days with rates of 178 and 200 which dropped to 100 and less on carotid pressure. She improved on quinidine and sedatives but later wrote me from Leadville, Colorado, (elevation over 10,000 feet) that she was married and three months pregnant. Quite naturally she was very unhappy there but has since returned to Kansas, had her baby and is doing well.

Another problem in paroxysmal tachycardia is the anginoid pain that accompanies attacks. I have a woman of fifty who has numerous episodes a year, some of which she gets over alone and some of which I have to stop with apomorphine. With any prolonged tachycardia she has severe substernal pain radiating to her neck and left arm. She feels well between attacks and refuses an electrocardiogram. Her prognosis is necessarily uncertain.

The abdomen is the common battle ground of



diagnosis for the internist and the surgeon alike and a complete survey would be impossible and productive of much argument. There are a few common mistakes which can be agreed upon, I think, and still emphasized with some advantage. First of these is the fact so often overlooked by the laity and some of the profession, that abdominal pain and gastro-intestinal symptoms quite frequently occur with infections elsewhere. Typical of this was the youngster of 2 sent to the hospital in 1935 by an osteopath with the diagnosis of appendicitis because of abdominal distention and pain. He was just over the measles, had a temperature of 103 degrees and a discharging ear. He made an uneventful recovery after paracentesis. All of us have had similar experience, the pediatrician in particular, for the infantile intestinal tract is notoriously unstable. Last summer I had a boy of 14 in the office with no complaints other than pains in the abdomen and head, and vomiting when salts were administered. He denied sore throat among other symptoms and yet an acute follicular tonsillitis was present and apparently accounted for all his symptoms.

Appendicitis is certainly not a medical problem but the diagnosis still falls to us and since the surgeons insist on early recognition we must be ready to differentiate appendicitis and its imitators. In 1932 I had an interesting case in which I was purely the middle man. A girl of fourteen with some history of abdominal distress in the past developed pain and vomiting with constipation. Early in the day a homeopath made a diagnosis of "ptomaine poisoning" and evidently administered compound licorice powder. A boy who is now studying medicine but then was in school saw her as a friend and insisted on calling another physician. When I got there she was having typical appendiceal pain and tenderness with the right leg drawn up but in addition a sharp colitis pain with diarrhea apparently from the laxative. The white blood count was 31,000 and a gangrenous appendix ruptured as it was removed about an hour later. She had a prolonged convalescence and later required a second operation for incisional hernia all because of the mistaken diagnosis, although corrected by a boy not yet in medical school.

Decisions on surgical intervention often hang on trifles and on one occasion this trifle, the patient's assurance over the phone that he was all right, cost his life in all probability. The boy was twenty-two, had had a clean appendectomy a year before and a negative history until December 18. That day he ate a noon dinner and returned to work at a filling station. Sitting in a chair he developed sudden abdominal cramping and vomited. When I saw him

the temperature and pulse were normal but the cramps severe. They did not respond to atropine, the vomiting continued and enemata gave no results. A surgical consultation was advised and when refused he was given one-sixteenth grain of morphine to tide him through the night. This was against my better judgment but the dose seemed inadequate to mask any real pathology in a husky boy. I phoned the next day and was surprised to have the patient answer the phone and report himself about well. Later his family reported him visiting with friends and later sleeping. The next day at 9:00 a. m. I found him in shock and immediate operation disclosed a gangrenous diverticulum strangulated in a band of adhesions and considerable gangrenous bowel. The following day he died.

One apparently simple problem I want to touch on merely to illustrate how thorough our search must be to complete a diagnosis. For over a year I treated a little old lady of sixty-four for excruciating pains in the chest, the back, the extremities, etc. with intermittent swelling of areas in the palmar fascia, swelling in the various patellar bursae, etc. Failing to find any focus except a mild gall bladder infection, even after adequate consultation and getting no improvement on forced vitamins and similar treatment, I sent her to one of the larger clinics for study. They made a few minor contributions but chiefly x-rayed her gums which I had overlooked because she had worn full plates satisfactorily for twenty-five years. An unerupted third molar and three root fragments were discovered. These were removed with some reaction, and in two or three months the patient was out to church, riding in a car and enjoying life for the first time in two years.

In closing I want to mention the diagnosis that gave me more enjoyment than any I have ever made. I was called to see a friend and associate of mine who limits his work to eye, ear, nose and throat. His tonsils, of course were out. He was chilly, achy and really sick with a temperature of 103 degrees when I saw him at home. Thorough examination revealed nothing but an inflammation with dirty exudate on some adenoid tissue posterior to the tonsillar pillars. Under treatment by his partner he recovered in short order.

I have spoken of the necessity of keeping certain diagnoses in mind. This is brought home to us as often by our errors as by our triumphs. I had never seen small pox until I came back to Kansas from medical school and one of my first cases was unrecognized and ready for dismissal after the fever, headache, vertigo, etc. subsided on the third day and only luck prevented her getting out and to school before I was called back because of a pustular

eruption. Small pox is rare and should be rarer but as long as it exists it must be kept in mind. Last fall I had my first typhoid fever case in ten years and as the symptoms were not classical, I missed it, the veteran nurse who cut her professional teeth on typhoid (but had seen none for years) did not recognize it, a very competent laboratory technician reported the growth on the blood culture as contamination. The Board of Health laboratory finally settled it by growing *B. Typhosis* from the clot sent in for Widal<sup>7</sup>. This is simply another case overlooked because the symptoms were not typical and none of us had seen typhoid for years.

I have doubtless undertaken too much in this short paper to accomplish fully any of my objectives. Perhaps I have given some hint of my conception of diagnosis as a fine art and necessarily a harsh taskmaster, not tolerating the all-inclusive "flu". I hope that I have emphasized my definite conclusion that the diagnostician should not be hampered by the boundaries of the various specialities but should be able to give an opinion on acute infection in the abdomen, should be able to recognize skin disorders with constitutional symptoms, some of the graver eye conditions, and similarly serve his patients by recognizing pathology wherever present. Thoroughness in examination has been emphasized often; I believe thoroughness in history taking is equally important. I have tried to indicate the danger of various poisons and irritants, the necessity of keeping in mind the ever-present syphilis, the need for reading and culling and remembering what is new in medicine, and finally I have probably demonstrated that an internist like any other enthusiast can talk a long time if given the opportunity.

## BIBLIOGRAPHY

1. Osler & McCrae, *The Principles & Practice of Medicine*, 9th Edition, 1923.
2. a-J. G. Molner & J. A. Kasper, An Outbreak of Jaundice in Detroit. *Journal American Medical Association* 110:2069, June 18, 1938.
- b-JC. Willett, E. Sigoloff & C. L. Pfau, An Institutional Outbreak of Jaundice. *Journal American Medical Association* 106:1644 May 9, 1936.
- c-Editorial, Spirochetal Jaundice, *Journal American Medical Association* 109:1128 October 2, 1937.
- d-Popovici-Lupa & V. Petrescu-Coman, Epidemic Benign Icterus in Children *Monats. Für Kind.* 70:57 (Ab) *Journal American Medical Association* 109:3987 July 31, 1937.
- e-H. H. Towler & J. E. Walker, Spirochetal Jaundice, *Journal American Medical Association* 89:86 July 9, 1937.
3. Queries & Minor Notes, *Journal American Medical Association* 109:975 September 18, 1938.
4. Willimott & Freiman, Potassium Permanganate Poisoning. *British Medical Journal* January 11, 1936 (Ab) *Journal American Medical Association* 106:18 May 2, 1936.
5. J. C. Sharpe, Bromide Intoxication, *Journal American Medical Association*, 102:18 May 5, 1934.
6. Maurice Snyder, Idiopathic Hypochromic Anemia, *Journal Kansas Medical Society* 37:4, April 1936.
7. Ross L. Laybourne, The Blood Clot Culture as an Adjunct to the Widal Test, *Journal Kansas Medical Society* 37:1, January 1936.

## ABSTRACTS

**Rationale of Sulfanilamide in Gonococcic Urethritis:** One of the authors (Farrell) has treated ten cases of gonorrheal urethritis with sulfanilamide by mouth. Only five of the patients responded to treatment, the other five seemed to derive little benefit from the drug, as evidenced by persistent discharge, so that local treatment was begun. None of the ten patients had any complications such as posterior urethritis, prostatitis or epididymitis. Because of the repeated observations by the various observers that no complications occur, it seemed advisable to James I. Farrell, Evanston, Ill.; Yale Lyman and G. P. Youman, Chicago (*Journal A. M. A.*, April 9, 1937), to determine a rational basis for the use of sulfanilamide in gonorrhea. Large male dogs were used in their experiments. The dogs were given sulfanilamide by mouth for several days, the daily dose being approximately 0.18 Gm. per kilogram. The prostatic fluid of two dogs which had received sulfanilamide intravenously after a sample of normal prostatic fluid had been obtained was tested for germicidal activity. Both samples were tested with *Bacillus soli* and only one with *Staphylococcus aureus*. The sulfanilamide is excreted in bactericidal concentrations, in both the urine and the secretion of the posterior urethra, when adequate doses are given. According to the experiments, from 10 to 15 mg. of sulfanilamide seems to be adequate antiseptic concentration. The experiments demonstrate that the bactericidal power of prostatic secretion on colon bacilli and *Staphylococcus aureus* is marked. In twenty-four hours all the bacteria were reduced in number. In dogs given sulfanilamide in approximately human doses, there were no viable bacteria on the plate at the end of twenty-four hours. The drug appears to act directly on the infecting organisms in the urinary tract.

**Durtaion of Smallpox Immunity:** In 1936 a study was made of smallpox immunity in 1,053 matriculating college students at Kansas State College. In September 1937 David T. Loy and M. W. Husband, Manhattan, Kan. (*Journal A. M. A.*, Aug. 27, 1938), made a similar investigation of 986 students with additional data on the duration of smallpox immunity and the effect of multiple vaccinations. In summary they state: 1. Of the students who matriculate at Kansas State College (a) approximately one fourth have never been vaccinated against smallpox and (b) approximately two thirds are in some degree susceptible to smallpox. 2. Only 5.9 per cent of the 1937 group had been vaccinated more than once previously. 3. There are about 20 per cent more persons with complete immunity in the previously vaccinated one to five year group than in the group vaccinated from six to ten years previously. 4. There are about 20 per cent more persons with complete immunity in the multiple previously vaccinated group than in the once previously vaccinated group. 5. The method of noncompulsory vaccination used has proved to be almost 100 per cent acceptable to the student group.

**Sulfanilamide Used in Puerperal Fever** markedly reduces the length of hospital stay and the mortality rate. The average stay in hospital for treated cases is 19.7 days, with mortality rate of 5.5%, as compared to 31.3 days and 22.8 per cent in patients not treated with sulfanilamide. Colebrook & Purdie, *Lancet*, 2:1291, 1937.



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

The special meeting of the House of Delegates of the American Medical Association is now history. Only three times has a special meeting been held in the history of American Medical Association. Of the possible seventy-four delegates only eight were absent, showing the intense interest and earnestness of the organization.

Including officers of the American Medical Association and the state societies approximately two hundred and fifty doctors were present.

Kansas was well represented and made a place on a very important committee.

The details and results of the meeting have been published in the Journal of the American Medical Association, and should be familiar to all of us. It is quite evident there is very little disagreement in the profession concerning regimentation of medicine. This in itself will not get results. The public should be informed and demands should be made on our next Congress to defeat the fifth proposal of the inter-departmental committee.

However, we have problems in our own State Society, that should be attended to right now.

You have all received bulletins from Dr. E. C. Duncan, Chairman of our Committee on Public Policy, and should know, that we in Kansas will have to exert ourselves to maintain the position we have attained.

I have received several letters of criticism the past few days, from members of our Society, that we are doing very little to offset the organized efforts of the irregulars, in their pressure contacts of candidates for our legislature. They are employing full time men to do this work for them, etc.

Dr. Duncan's committee is spending much of their time and effort, but they cannot do this job alone. They have given you the facts and have suggested the plan, and I feel sure if full cooperation is given that much can be accomplished.

This should be the job of every member of the Society, and not expect Dr. Duncan and his committee to accomplish this stupendous task unassisted. Let us all do our full share now!

N. E. Melencamp, M. D., President.

---

## EDITORIAL

---

### THE SPECIAL SESSION

The recent special session of the House of Delegates of the American Medical Association came in response to a call from the Board of Trustees for the purpose of consideration of the national health program submitted to the National Health Congress.

The meeting of the House of Delegates in extraordinary session at a time of impending crisis was an important event in current medical history. It was an occasion for speculation and some observers were expectant of a turn of affairs wherein proposals not in agreement with the former attitude of the governing body of the American Medical Association would be forthcoming. As the session progressed it became evident that there was no lack of accord among the members of the House of Delegates. When the report of the committee on consideration of the national health program was presented the recommendations were all in keeping with the position maintained by the leadership of the American Medical Association.

The provision for widening the scope of workmen's compensation insurance to include illness sustained as the result of employment in industry and sanction of indemnity insurance as a protection against loss of earning power during illness are recommendations which represent no concessions to those who seek through the application of the insurance principle to solve the problem of cheaper medical care.

It is thought to be doubtful that profit seeking insurance companies will enter upon a wide spread campaign to sell sick indemnity insurance because of the action of the House of Delegates. This type of insurance, if it were profitable, would have long since been popularized.

The recommendation contained in the committee's report that a public health educational program be entered upon to reach all of the people, is of vital importance and no time should be lost in organizing the facilities for the spread of public health information. It cannot be denied that thousands of deaths every year are preventable among the well-to-

do of the population who go to irregular practitioners and quacks because of sheer ignorance. The United States Public Health Service should assume the responsibility for such a publicity program with the cooperation of organized medicine.

The report of the committee closed with the recommendation that a committee of not more than seven physicians representative of the practicing profession, under the chairmanship of Dr. Irvin Abell, President of the American Medical Association, be appointed by the Speaker of the House to confer and consult with the proper federal representatives relative to the proposed national health program. If these men can be brought together with Government representatives and a willing spirit to understand each other's point of view is shown, some degree of adjustment may be effected whereby adverse medical legislation can be avoided in the next session of Congress.

---

### THE ROLE OF THE AUTOPSY IN GENERAL PRACTICE

Doubtless the causes of death, as recorded in the Bureau of Vital Statistics, would be far more accurate if postmortems were performed routinely, but unfortunately this ideal cannot be attained due to the public's inherent aversion to necropsies. Fear, superstition, and ignorance are largely responsible for censor or disapproval.

There is nothing more gratifying than to carefully observe the course of a disease and to correlate the clinical findings with the sequence of pathological changes which take place in the human organism after death has supervened. Each autopsy is a lesson in itself. It confirms or rejects our diagnosis.

It is recognized that Austria has, in the past, produced some of the world's most eminent diagnosticians and pathologists. In that country, autopsies were sanctioned by the government and conducted as a matter of routine. The Austrian medical profession, as a whole, profited by their mistakes and gained abundantly in knowledge and experience. It would indeed be an accomplishment if such a law could be enacted in our national legislature.

If it were possible to educate the American public to the need of autopsies, a great step will have been



taken in scientific investigation. The average layman believes the corpse of his loved one will be mutilated if he consents to a postmortem examination. Then, too, since life cannot be restored, "Let him rest in peace." Still others are religious fanatics, firm in their conviction that the deceased cannot enter the Kingdom if his body is in any way disturbed, or if tissues or organs have been removed for microscopic inspection.

Obtaining written consent to perform autopsies constitutes an art which occupies a unique, but nevertheless important, place in medicine. There are devious avenues of approach, but the most effective weapon of persuasion is that which appeals to reason. Convincing the individual that postmortem is essential to the establishment of an accurate diagnosis in an obscure case will often meet with success, for the people of today are intensely interested in the hereditary aspect of disease. For example, one is particularly curious to learn whether or not cancer has invaded his family tree. If the responsible relative or friend is given absolute assurance that the remains will not be hacked to bits, and that an autopsy is carried out as meticulously as an operation, he will, in the vast majority of cases, be satisfied.

Written consent to execute autopsies should always be secured as it is a positive means of averting unpleasantness and possible litigation. Each authorization should include a clause granting the physician the right to remove any tissue or organ for microscopic analysis, as this is as much a part of the examination as the performance of the gross dissection.

Not only are complete postmortems of definite value in ascertaining the correct cause of death, but they supply fresh material for anatomic study and review. It is an opportunity which should be welcomed enthusiastically by both clinician and surgeon.

A good set of instruments will greatly facilitate autopsy technique, enabling the operator to do a clean, rapid dissection. Preliminary ligation of blood vessels before severing will make a friend of the embalmer and will in no way interfere with his handiwork, thus enlisting his whole-hearted cooperation.

Each postmortem is a graduate course in anatomy

and pathology, since even the laboratory cadaver is not available to the doctor except in medical schools, and is an excellent check on our diagnostic acumen.

Paul E. Craig, M. D.

## MEDICINE UNDER THE NEW DEAL

By H. L. MENCKEN\*

The project of the New Deal Kremlin to liquidate the American Medical Association under the Sherman Act appeared at first glance to be only an elephantine sort of practical joke, and in that character I discussed it lightly in the "Sunpaper" of August 5. But in a little while news came from Washington that the boys really proposed to go through with the show, and on August 13 a talented New Deal professor, Dr. Walton Hale Hamilton, was assigned to set me right about it and put me in my place.

I have read Dr. Hamilton's exposition in an humble spirit, but can only report that it leaves me profoundly unimpressed. It is smart but not adroit; voluptuous but not persuasive. Its substance is contained in the following paragraph:

The technology of medicine has made its great advances by trial and error; the arrangements under which patients have access to medical services must be kept subject to a like revision. It is silly to encourage experimentation in the medical laboratory and to forbid it in the realm of medical economics.

Well, what does this mean? If it means anything at all, it means that the American Medical Association is opposed to all such experimentation, and is trying by some means or other to stop it. Is there any truth in that allegation? There is no truth in it whatsoever.

The plain and simple truth is that the "Journal" of the association, for eight or ten years past, has given over a large part of its space to the description and discussion of new "arrangements" of medical practice, and that more than one of these "arrangements" has been passed as unobjectionable, and is being tested at this very moment by members of the association in the highest standing.

I point, as a near and obvious example, to the scheme of the Associated Health Service of Baltimore. That organization, which now has nearly 25,000 members, is not only tolerated by the local bigwigs of the A. M. A., but was actually launched and underwritten by some of them. All of the Class A hospitals of Baltimore, absolutely without exception, have agreed to accept subscribers to the service as patients, and all or nearly all of them contributed to the funds needed to set it going. Two of its directors are Dr. Winford H. Smith, director of the Johns Hopkins Hospital, and Dr. Arthur J. Lomas, director of the University Hospital, and not a few of the staff doctors of both hospitals have joined it as members, and brought in their wives and children.

The reasons for this tolerance are not far to seek. They lie in the plain and single fact that the Health Service does not undertake to practice medicine, but simply provides its members with hospital care and accommodation. Every one of them is free to choose his own doctor, and any doctor may be chosen who has the privilege of taking patients to any Baltimore hospital. There is no intervention between doctor and patient. There is no shading or conditioning of the doctor's professional dignity and independence.

The "arrangements" to which the American Medical Association objects, and quite properly objects, are entirely different. They not only offer hospital accommodation, but also medical service. They employ doctors, organize them into staffs, put them under superiors (some medical, but others lay), and hire them out to subscribers. Whatever the subscribers pay for their services goes, not to the doctors, but to the organization. It pays them whatever they are willing to work for, and keeps the rest.

Obviously, no doctor who works under such conditions can be said to maintain a strictly professional status. He may have a good job; he may like it, and he may give competent and conscientious service to the patients assigned to him, but in the last analysis they are the association's patients, not his. It may take them away from him at will, and assign him others. It may take them all away from him by dismissing him. They exist as his patients only by the association's grace, and on conditions that it lays down.

Certainly the lawyers in the Department of Justice

must be well aware that an analagous effort to invade and deprofessionalize their own profession has been under way for years and that nearly all the decent lawyers in America have opposed it violently and gone into court time and again to prevent it. All the objections that these decent lawyers have brought against the practice of law by corporations are valid against the practice of medicine by corporations. Both schemes, however artfully they may be disguised, involve the organization of professional men into gangs bossed by laymen and the retailing of their services to all comers. Both are completely destructive to their professional status.

The present disingenuous assault upon the American Medical Association did not originate in the Department of Justice. It originated in quite other quarters and has been going on for a long while. There are doctors who aspire to office in the association, with all the honors and dignities thereto appertaining, but do not seem to be able to get the necessary votes: they appear to believe that their chances would be better under some sort of medical new deal. And there are quacks who have felt the association's heavy hand: they are against it on all counts and to the death.

Both these parties have been on the warpath for years. Of late they have been joined by a miscellaneous rabble of pinks, some of them outright converts to the Moscow hooey and others members of the "I'm Not a Communist—But" Association. The aim of these brethren is to nationalize the profession of medicine in the United States as it has been nationalized in Russia. Some of them say so frankly, and undertake to prove idiotically that the Russian system is better than the American. The rest, less honest, root for it without openly advocating it.

All the pink weeklies and other manic-depressive sheets are hot against the A. M. A. and belabor it constantly. They denounce it under the name of the medical trust, and allege that its members are racketeers who rob their patients and oppress the poor. The justice and decency of these charges may be indicated by putting them into concrete terms. What they allege, in plain English, is that such men as Dr. Thomas S. Cullen, Dr. Dean Lewis and Dr. John T. Finney are racketeers, and that scores of able and faithful men and women who labor in the Johns



Hopkins and University of Maryland dispensaries every day are oppressors of the poor.

The chief butt of all such scurvy liars is Dr. Morris Fishbein, editor of the "Journal of the American Medical Association." In the fulminations of the pink weeklies he is commonly promoted to the presidency of the association and depicted as its Stalin, Hitler and Mussolini. I happen to be well acquainted with Dr. Fishbein, and may be presumed to have some qualification for judging him as an editor. It is my belief that no abler, more honest, more intelligent or more courageous editor is in practice in the United States. Week after week, year after year, he produces an unfailingly competent and valuable paper.

In all the history of American medicine, no other medical editor save his predecessor and mentor, Dr. George H. Simmons, has labored more valiantly and effectively to raise and safeguard the standards of the profession. He has been in the forefront of every effort, by whomsoever initiated, to put down buncombe and quackery and to promote sound medicine. Every improvement that has been made in his time, whether in professional education, in hospital service, in research and experiment, or in the bettering of relations between doctors and the public, has had his energetic support.

The quacks of all schools are naturally against him. The osteopaths and the chiropractors, the patent medicine harpies and the Christian Scientists have been banging away at him for years. Now they have got the support of the New Deal. It is a logical and legitimate alliance.—\*The Sun, Baltimore, Maryland, August 21, 1938.

---

The Treatment of Addison's Disease: Edward H. Rynearson, Rochester, Minn. (Journal A. M. A., Sept. 3, 1938), discusses the treatment of Addison's disease by presenting hypothetic case histories, which include the patient in a crisis of Addison's disease, the patient with Addison's disease who requires an operation, the patient with chronic Addison's disease and the patient suspected of having Addison's disease. Progress in the treatment of Addison's disease is being reported and it is believed that the best available treatment should consist in (1) the restriction of potassium in the diet, (2) the addition of sodium salts to the diet, (3) the use of an active extract of the adrenal cortex when it is needed, (4) the training of the physician and the patient in the details of treatment of the chronic state of the disease and (5) the early recognition of acute remissions and their energetic treatment.

---

## CANCER CONTROL

---

### PRIMARY CARCINOMA OF THE LUNG

Thomas G. Orr, M. D.

and

Harry R. Wahl, M. D.\*

Kansas City, Kansas

It has been estimated that five to ten per cent of all carcinomas are to be found in the lung. In recent years an appreciation of the importance of this carcinoma has stimulated great interest in the subject. It is difficult to determine whether or not the disease occurs more frequently than in former years or if improved diagnosis and increasing life span to the cancer age have caused an apparent increase in the tumor. At any rate it is of sufficient frequency to make it one of the more important of the cancer problems.

#### ETIOLOGY

Like the cause of cancer elsewhere the exact etiology of carcinoma of the lung is not known. Many theories have been advanced concerning its causation, among which have been suggested influenza, war gas, tuberculosis, dust of various types, smoke, smoking and the gas fumes from automobiles. For many years cases of carcinoma of the lung have been frequently observed among miners from the Schneeberg mines in Saxony. Emanations from radioactive dust particles in these mines has been suggested as an explanation of the frequency of such tumors in this locality. It is very probable that chronic irritation of some kind plays an important role.

Carcinoma of the lung occurs most frequently in middle and later life, the largest number reported have been in male patients between the ages of fifty and seventy. Striking exceptions are also recorded in patients younger than twenty years of age, although such cases are very rare. A carcinoma of the lung has been reported in one patient sixteen months old.

#### PATHOLOGY

It is now agreed that lung tumors almost universally arise from the epithelium of the bronchi. They are most common near the hilus although they may be found in other portions of the lung as multiple nodules, diffuse infiltration, or miliary deposits. They may also involve the pleura. Microscopically they are classified as: (1) Squamous cell,

\*University of Kansas School of Medicine.

(2) Adenocarcinoma, and (3) Undifferentiated carcinoma. In the third group are found many types of cells including giant cells, oval cells, cuboidal and cylindrical cells and basal cells. They may be of the spindle cell type which has led to the term "oat cell" or they may be chiefly composed of round cells.

Carcinoma of the lung metastasizes widely involving organs which are not commonly involved by metastases from other types of carcinoma. This is strikingly illustrated in metastasis to the suprarenals and the brain. Metastases have been found in the pleura, lymph nodes, liver, lungs, kidneys, bones, suprarenals, brain, heart and pericardium, pancreas, gastro-intestinal tract, thyroid, spleen, muscles, ovaries, uterus, bladder, prostate and skin. Symptoms due to metastases may manifest themselves in organs in which they occur before there is much clinical evidence of the primary tumor in the lung. This of course makes a knowledge of the frequency of metastases important to the clinician. Operations for brain tumor have been performed and the condition found later to be a metastatic growth from a primary carcinoma of the lung.

#### SYMPTOMS

A diagnosis of carcinoma of the lung is made difficult by the wide variety of symptoms by the lesion. The two outstanding symptoms are cough and pain. The cough does not differ from that of many other lesions in the respiratory tract and is not accompanied by any constantly typical expectorant material. The "current jelly" type of expectoration has been mentioned as characteristic but it is doubtful if this occurs in a large per cent of cases. The sputum may be of the glairy, mucopurulent or frankly purulent type. If associated with lung abscess the sputum may be quite fetid. In some cases the cough may be absent altogether. The character of the pain also varies and may be nothing more than a discomfort or a sense of depression in the chest. In later cases pain may be intense and assume the character of pleuritic pain. Asthmatic type of breathing with its associated discomfort is not uncommon. In advanced cases dyspnea is found. In late cases there may be loss of weight and strength and osteoarthropathy changes may be present. Fever occurs in a considerable number of patients. Hemoptysis is often an early symptom. Dysphagia and symptoms localized in other organs as a result of metastases may be the patient's first complaint.

#### PHYSICAL SIGNS

Like the symptoms the physical signs are quite varied in their manifestations. In the early stages there may be almost complete absence of any local-

ized signs of disease. In the later stages the disease may simulate the findings of tuberculosis, atelectasis, bronchiectasis, lung abscess, pleurisy or pleurisy with effusion. The two most important diagnostic helps are roentgenography, and bronchoscopy. An accurate diagnosis with the x-ray is many times not possible, but to the experienced examiner it should suggest the possibility of carcinoma if the disease is kept in mind. It has been stated that accurate diagnosis may be made with the bronchoscope and biopsy in seventy-five per cent of the cases. When the lesion is located in one of the large bronchi it is accessible to both inspection and removal of a portion for pathological examination in a very high percentage of cases. Thoracoscopy may be of some value in isolated instances.

#### DIFFERENTIAL DIAGNOSIS

Differentiating carcinoma of the lung from other common lung conditions may present a problem which is well-nigh unsolvable if the tumor is located out of reach of the bronchoscope. Careful clinical observation and repeated x-ray examinations will, however, suggest the probable diagnosis in a high percentage of cases. It may exist with other diseases of the lung which frequently obscures the diagnosis. A small primary lung tumor with metastases that produce symptoms may lead to an erroneous diagnosis. Since carcinoma of the lung is quite common the clinician should suspect the disease in any chronic lung disease developing during the cancer age, presenting symptoms that are not clear-cut.

#### TREATMENT

In recent years new hope has been offered in the treatment of lung cancer. Cures have been reported by direct treatment through the bronchoscope and by complete or partial pneumonectomy. Successful operations upon the lung for the removal of cancer have been too recent to determine their ultimate value. X-ray therapy may be of some palliative benefit but offers very little hope of cure. It should be employed as an adjunct treatment to operation or when the disease is considered inoperable. X-ray treatment will frequently cause an amelioration of pain and pressure symptoms.

Complete or partial pneumonectomy is recommended as the treatment of choice. Recent improvement in the technic of chest surgery has reduced the operative mortality until operation is a justifiable procedure in early cases of lung carcinoma. Clinicians should not hesitate to advise operation in selected cases since it offers definite hope of cure in a condition having a mortality of 100 per cent without treatment.



## EYE, EAR, NOSE & THROAT

### OBSERVATIONS ON THE ACTION OF BENZEDRINE SULFATE OPHTHALMIC SOLUTION USED ALONE IN THE PRODUCTION OF MYDRIASIS\*

Lyle S. Powell, M. D.,

Lawrence, Kansas  
and

Marshall E. Hyde, M. D.,

Osawatomie, Kansas

This report deals with one of a series of studies being conducted at the Osawatomie State Hospital on cycloplegia and the effect of various drugs used for the production of cycloplegia and mydriasis. Previous reports record the action of homatropine and benzedrine in combination<sup>1,3</sup> and the action of eserine on the cycloplegia produced by homatropine and benzedrine in combination<sup>2,3</sup>.

This report is submitted on the action of benzedrine sulfate ophthalmic solution used alone in the production of mydriasis before ophthalmoscopic examination of the fundus. Section I of the present study gives the method and results obtained in patients ranging in age from sixteen to thirty years, and Section II deals with a group of patients between fifty and seventy years of age.

Observations made and recorded in this study include:

1. The size of the pupil in millimeters.
2. Reaction of the pupil to light.
3. Ability to read Jaeger test type.
4. Accommodation as measured by the Prince rule.
5. Tenison determinations (made in Section 11 only.)

#### SECTION I

The patients used in this group are cooperative, young adult, male and female, state hospital patients. These people are in good physical condition. Such a group of patients is available at all times for careful and detailed observations and in this way offer a relatively ideal situation for the type of study under way.

Twenty-four patients were selected and divided into four groups of six each. Group A received a

single dose consisting of 1 drop only of the one-quarter of one per cent solution, Group B received drops one every five minutes for four doses of the one-quarter of one per cent solution. Group C received a single dose of one drop only of one per cent benzedrine sulfate and Group D received drops one of one per cent solution every five minutes for four doses.

#### COMMENTS ON RESULTS

The results were kept in tabular form, and may be had upon application to the authors. In Group A there occurred a definite moderate increase in the size of the pupil. The average increase was two millimeters and was accompanied by a loss of the reaction of the pupil to light. Similar, but greater, dilatation was obtained in Groups B, C, and D, and was uniformly accompanied by a loss of the reaction of the pupil to light. Dilatation of the pupil had subsided at the end of four hours in most of the patients receiving the one-quarter of one per cent solution, but persisted at the end of four hours in those patients receiving the one per cent solution. There was no appreciable change in accommodation in any group.

#### SECTION II

For this study a group of twenty-four patients was selected ranging from fifty to seventy years of age. The purpose in using this age group was to determine any variation that might result in the action of this drug in older people, and the effect on intraocular tension. The same observations were made and recorded in this group as in Section I and in addition tension determinations were made using the Bailliart Tonometer. This method accordingly gave the size of the pupil, the reaction of the pupil to light, the ability of the patient to read Jaeger Test Type, accommodation as measured by the Prince rule, and the intra-ocular tension (Bailliart) at one-half hour, one hour, two hours, and four hours following drug administration.

Previous studies had demonstrated the greater effectiveness of multiple instillations of the one per cent solution in older people. Accordingly the plan used for drug administration was to instill benzedrine sulfate ophthalmic solution one per cent, drops one in each eye every five minutes for three doses. The results obtained were recorded in tabular form and are available.

#### COMMENTS

1. On the size of the pupil: Constant, uniform dilatation of the pupils occurred following benzedrine administration which reached the maximum one hour following benzedrine instillation. There was considerable individual variation in the amount

\*From the Department of Ophthalmology, Osawatomie State Hospital, Osawatomie, Kansas.

of the dilatation but at least two millimeters or more of dilatation occurred in every patient. The maximum dilatation that occurred following benzedrine was four millimeters and the maximum pupillary size following benzedrine was eight millimeters.

2. On the reaction of the pupil to light: The pupils were uniformly inactive to light one-half hour following the administration of benzedrine and remained so four hours following the administration of benzedrine.

3. On the change in accommodation: These patients had so little accommodation that an effect could not be determined. Not a single patient was able to muster more than 2D of accommodation on the Prince rule prior to drug instillation. There was a suggestion of possible slight impairment of accommodation in a single patient.

4. On the change in tension: No significant change in tension was observed.

5. Subjective symptoms: No subjective symptoms whatever occurred with the exception of a slight "burning sensation" on the instillation of the drops. This sensation was entirely comparable to that experienced when a drop of cold water was instilled into the conjunctival sac.

#### SUMMARY

In patients ranging from sixteen to thirty years in age the following observations are offered:

Benzedrine sulfate solution one-quarter of one per cent produces definite appreciable but moderate and somewhat transitory dilatation of the pupils accompanied by temporary loss of reaction of the pupil to light. These changes are more marked and last longer following multiple instillations of the solution in each eye than following the instillation of a single dose of one drop only of the one-quarter of one per cent solution. The one per cent benzedrine sulfate ophthalmic solution produced constant moderate to marked dilatation of the pupils with an accompanying loss of the reaction of the pupil to light. This action resulted from the administration of a single drop of the one per cent solution once only. Administration of the same dosage at five minute intervals for four doses resulted in the drug having a more marked and lasting effect.

In patients ranging from fifty to seventy years of age the results were similar to those obtained in the younger age group. Adequate dilatation was obtained with multiple instillations of the one per cent solution. Benzedrine sulfate one per cent solution ophthalmic produced definite and constant pupillary dilatation with loss of the reaction of the pupil to light. No appreciable change in accommodation in any group of patients following the administration of benzedrine sulfate ophthalmic so-

lution was observed. Subjective symptoms were of no consequence.

#### CONCLUSIONS

Results obtained following the administration of benzedrine sulfate ophthalmic solution have been recorded in reasonable detail in patients between sixteen and thirty years of age, and in another group between fifty and seventy years of age. These results indicate that following the administration of benzedrine sulfate ophthalmic solution there occurs constant, dilatation of the pupils with loss of the reaction of the pupil to light, accompanied by no appreciable change in accommodation, intraocular tension, or objectionable subjective symptoms.

#### BIBLIOGRAPHY

1. Powell, Lyle S., and Hyde, M. E.: The Effect of Benzedrine Sulfate Solution on Cyclopia, *Journal Kansas Medical Society*, January 1938, 39:1:1-4.
2. Powell, Lyle S., and Hyde, M. E.: Observations on Action of Eserine Administration During Homatropine-Benzedrine Cyclopia, *Journal Kansas Medical Society*, February, 1938.
3. Powell, Lyle S.: Transactions American Academy of Ophthalmology and Otolaryngology, 1938. The Practical Use of Homatropine-Benzedrine Cyclopia.

---

## TUBERCULOSIS CONTROL

---

### A LOOK BACKWARD AND FORWARD

J. Arthur Myers, M. D.

Minneapolis, Minnesota

Our methods of treatment have advanced as fast as those for diagnosis. The indications for artificial pneumothorax have extended to the minimal lesion; surgical collapse has been introduced and perfected. The importance of the re-education and rehabilitation of recovering tuberculosis patients has been recognized and these programs are being developed everywhere. Largely as a result of the activities of the National Tuberculosis Association, mortality, morbidity, and infection attack rates have fallen spectacularly. Indeed, far more has been accomplished in the control of tuberculosis since the organization of the National Tuberculosis Association than in all the centuries of the past.

This is no time to relax our efforts; our programs must be extended and intensified. In many parts of the country more sanatoriums must be built; more general hospital beds must be made available. No community can hope to solve its tuberculosis problem until it has institutional beds available for every person who has tuberculosis in communicable form. The National Tuberculosis Association and all of its component organizations can control tuberculosis in



this nation. As long as there is a single infected person in any community, a tuberculosis problem exists which must be combated.

### PRIMARY TUBERCULOSIS INFECTION IN ADULTS

Henry C. Sweany, M. D.

Chicago, Illinois

The classical primary tuberculosis infection based on the Parrot Cornet-Cohnheim laws and the work of Ghon, Ranke and others, has apparently been so well established that any exceptions would tend to "prove the rule" rather than invalidate the established principles.

Within these general laws, however, there are variations that occur rather consistently, forming definite types. It has been repeatedly observed and reported that aboriginal peoples produce primary lesions much like those found in infants, and as a result of this it has perhaps been prematurely concluded that primary disease is always the same, irrespective of the age or race.

Primary infection in so-called civilized races has, perhaps, been considered similar to that in the aboriginal, but because of such a high infection rate in the past, the older age groups have all been infected before adult life, and there hasn't been sufficient opportunity to study the condition.

During the last generation, however, there has been a great change in the tuberculosis incidence over the so-called civilized world. The infection rate has gone down so much that in a great many places less than half or even a quarter of the population is infected at any one time, whereas a generation ago over three-quarters were infected by fifteen years of age. In Chicago at the present, for example, the infection rate is such that about two-thirds of the population is uninfected by the time of graduation from the high school. In rural Minnesota, Iowa, and in regions of Scandinavia, it is even much lower. This changing condition is permitting more people to reach adult life without primary tuberculosis infection, and as a direct corollary there are many more people receiving their primary infection in adult life. That in itself should be no mystery, but the important feature is that many of these primary infections are apparently not being recognized as such.

During the course of my studies on the autopsy material at the Municipal Tuberculosis Sanitarium, many of these cases of adult primary infections have appeared and are so frequently atypical that a special study of this type seemed justified. In brief, the study seemed to show that adult primary infections tend to become more localized in the

parenchyma of the lung, and simulate the so-called reinfection type so closely that many times they are distinguishable only after careful study.

The most common type of these atypical forms are characterized by a small, parenchymal lesion that overflows into the surrounding tissue (perhaps by the finer bronchioles, as described by Loeschke), causing the formation of larger infiltrative masses which ulcerate into the reinfection type of disease. It is reinfection disease, but is connected by a direct chain of colonies to the first infection, and usually within a short period of time.

Another feature of this type of lesion is the small lymph node involvement. Sometimes the hilum nodes are not even reached. Perhaps contingent upon this also is the fact that primary adult infections practically never develop meningitis, as do children and almost all fatal cases in infancy.

Other features are that there is a greater tendency for these lesions to appear in upper halves of the lungs; for a slower development of the capsule and therefore a possible cause of early spread in unfavorable cases; for a shorter "latent period" from the infection to disease; and in general a closer resemblance to reinfection throughout.

The reasons for these variations are not yet predictable, but one factor seems to be the changing of the lymphatic anatomy as the individual advances in age. Another possibility is a non-specific factor, or factors, due to other infections causing the generation of non-specific antibodies or agents that tend to localize the germs and prevent their spread by the lymphatics. This perhaps could be explained on the same basis as the adjuvant action of non-specific protein on immunization in tuberculosis. The facts seem to be that the more primitive the living conditions of the hosts, the more "classical" are the primary lesions in adults, and on the contrary the more centralized the population the more atypical are the "oldest" tuberculous lesions in the body.

### GROWTH FACTORS FOR THE TUBERCLE BACILLUS

C. H. Boissevain, M. D., and H. W. Schultz, M. D.

Colorado Springs, Colorado

The tubercle bacillus grows rapidly and well on simple synthetic media but needs very heavy seeding. No growth occurs if less than about  $10^{-1}$  mg bacilli are planted. On egg medium, on the other hand, growth occurs after seeding of  $10^{-6}$  or  $10^{-7}$  mg.

A possible explanation is that the tubercle bacillus needs another factor for growth in addition to the well-known asparagin, glycerine, phosphate, magnesium, potassium and iron. It has recently

been found that certain pathological micro-organisms as staphylococci and diphtheria bacilli need accessory growth factors, as nicotinic acid amide and thiamin (vitamin B<sub>1</sub>). The possibility of the existence of such a growth factor for the tubercle bacillus is of special interest as it may lead to the control of the disease by diet.

We first investigated the possibility of riboflavin (vitamin B<sub>2</sub>) being the accessory factor as we had been able to identify riboflavin in cultures of tubercle bacilli by its fluorescence spectrum. However, the addition of riboflavin, either alone or together with other substances had only a very slightly favorable effect.

The growth promoting substance can be isolated from egg yolk by extraction with fat solvents. When this fat soluble growth factor is added to a synthetic medium, it forms a culture medium on which tubercle bacilli grow more rapidly than on egg medium, even after very small plantings.

Extracts have been prepared of this growth promoting factor which are active on addition of one mg to five cc medium, representing a 5000 times greater activity than is found in the egg yolk. Further study is needed to isolate and identify this material.

—34th Annual Meeting of the National Tuberculosis & Health Association, June 20 to 23, Los Angeles, California.

## NEWS NOTES

### OSTEOPATHS

Mr. Theo F. Varner, Assistant Attorney General, submitted the following order in a hearing on the case of State of Kansas vs Gleason in the Kansas Supreme Court on October 4:

#### ORDER

BE IT REMEMBERED, that on this \_\_\_\_\_ day of \_\_\_\_\_, 1938, this matter comes on to be heard upon the defendant's motion for judgment and motion for the appointment of a Commissioner, and upon the motion of the State for judgment upon the pleadings and admissions of the defendant, the plaintiff appearing by its attorneys, Clarence V. Beck, Attorney General, and Theo F. Varner, Assistant Attorney General, and the defendant appearing by his attorneys, W. H. Vernon and Frank McFarland.

The Court, after hearing oral arguments upon said motions, and being well and fully advised in the premises, finds and determines that this original action was instituted by the State of Kansas for the purpose of obtaining an authoritative determination of the law with reference to the extent and type of practice permitted to the defendant under his license as an osteopath.

The Court further finds that this defendant has heretofore propounded certain questions of law to this Court to be determined in advance of the trial of the facts, which questions propounded have been determined by this Court in accordance with a written opinion heretofore filed in this action.

It appearing to this Court that there is no substantial controversy over the type of practice heretofore carried on by this defendant, and that this defendant has admitted practicing, and has claimed a right to continue to practice drug therapy and operative surgery, meaning by these terms surgical operations by the use of surgical instruments, and the treatment or healing of human beings by the use of drugs, as distinguished from osteopathic treatment and healing by means of manual and manipulative methods; and it further appears that the defendant has admitted that he permitted other licensed osteopaths to practice drug therapy and operative surgery in the hospital conducted by this defendant.

This Court further finds that under the laws of this state, the defendant has no right, power or authority, by virtue of his license as an osteopath, to continue his practice of drug therapy or operative surgery, as determined in the written opinion heretofore filed.

IT IS THEREFORE BY THE COURT ORDERED, ADJUDGED AND DECREED, that this defendant be, and he hereby is ousted from the practice of drug therapy and operative surgery, meaning by the term "operative surgery" the performing of surgical operations by use of surgical instruments, and by the term "drug therapy" the treatment or healing of human beings by the use of drugs.

IT IS FURTHER BY THIS COURT ORDERED, ADJUDGED AND DECREED that this defendant be, and he hereby is ousted from permitting his hospital to be used by other osteopaths to practice therein drug therapy and operative surgery.

IT IS BY THE COURT FURTHER ORDERED, ADJUDGED AND DECREED that the defendant's motion for judgment and the defendant's motion for the appointment of a Commissioner is overruled.

IT IS FURTHER BY THE COURT ORDERED ADJUDGED AND DECREED that the costs of this action be taxed against the defendant.

Gleason's attorneys did not submit an order or a brief and instead submitted only an oral argument stating that they felt the opinion in the case is in error.

The Kansas Supreme Court now has the suggested order under advisement and it is probable that action in this regard will be taken within the next month.

### MOTHER'S MANUAL

The Committee on Maternal and Child Welfare has requested that the following notice be published:

"The Maternal Welfare Committee of the Society wishes to call the attention directly of the profession to the newly revised edition of the Kansas Mother's Manual published by the State Board of Health. The 100 page booklet contains a clear concise discussion of prenatal information for expectant mothers, as well as a section containing information and suggestions for the Mother of small children.

It is the feeling of the committee that this booklet has much value, and that every pregnant woman should receive a copy of it from the hands of her



physician early in her pregnancy. The committee has asked that copies of the new edition be mailed soon to every physician in the state so that all may look it over. The State Board of Health will supply as many additional copies as are asked for without charge.

The committee suggests all doing obstetrics and pediatrics review the booklet. Then supply them to patients. It is the belief of the committee that this will be a step ahead in producing a wide spread improvement in the public appreciation of adequate prenatal and post natal care."

### SPECIAL ASSESSMENT

Approximately one half of the counties in the state have forwarded reports and remittances on the special assessment.

Request is made that the remaining counties attempt to forward this as soon as possible.

### LEGISLATURE

The Committee on Public Policy issued four bulletins on the subject of legislation to the county medical societies during October. Recommendation is made that each county should meet and consider these bulletins carefully.

Plans have also been made wherein the various Councilors will hold monthly meetings of the presidents, secretaries, and official representatives of counties within their districts to discuss and prepare legislative plans.

### BOARD OF REGISTRATION

A meeting of the Board of Medical Registration and Examination was held in Kansas City, Kansas on October 6.

Foremost item of business was discussion and adoption of new rules and regulations governing the activities of the Board.

Another meeting of the Board will be held in Manhattan on October 29.

### TUBERCULOSIS MEETING

The Kansas Tuberculosis and Health Association held its Twenty-Seventh Annual Meeting in Wichita on September 16.

Presentations on the program were as follows:

"The Modern Christmas Seal Sale," Dr. Philip P. Jacobs, National Tuberculosis Association.

"Health Needs of Schools as Seen by Parent-Teacher Associations", Mrs. Rene Massmann, Pittsburgh.

"Contracts and Quotas", Dr. C. H. Lerrigo, Topeka.

"Eradication of Tuberculosis", Dr. H. L. Spector, Assistant Health Commissioner, St. Louis, Missouri.

"Legionville Preventorium", Report and Discussion.

"Preliminary to Sanatorium Care", Dr. Floyd C. Beelman, Wichita.

"As Pneumothorax Station", Dr. L. F. Steffen, ElDorado.

"In Case Finding by X-Ray", Dr. N. C. Nash, Wichita.

"Shall Tuberculosis Patients Be Treated in General

Hospitals?", Dr. H. I. Spector, St. Louis, Missouri.

"Norton Sanatorium—Present and Future", Dr. C. F. Taylor, Norton.

### INTERNATIONAL MEDICAL ASSEMBLY

The following communication has been received from the Program Committee including Dr. Elliott P. Joslin, President, Dr. George W. Crile, Chairman, and Dr. William B. Peck, Managing-Director of the International Medical Assembly:

"The twenty-third International Assembly of the Interstate Postgraduate Medical Association of North America will be held in the public auditorium of Philadelphia, Pennsylvania, October 31, November 1, 2, 3 and 4, 1938. All scientific and clinical sessions will take place in the auditorium. Hotel headquarters will be the Benjamin Franklin Hotel.

The members of the medical profession of Philadelphia are correlating for the clinics, an abundance of hospital material representing various types of pathological conditions which will be discussed by the contributors to the program.

In the neighborhood of eighty distinguished teachers and clinicians will appear on the program, a tentative list of which may be found in the September issue of the Journal. The subjects and speakers have been selected to consider practically all the subjects of greatest interest to the medical profession in general.

A full program of scientific and clinical sessions will take place every day and evening of the Assembly starting each morning at 8:00 o'clock. On account of the fullness of the program, restaurant service will be available at the auditorium at moderate prices.

The members of the profession are urged to bring their ladies with them as a very excellent program is being arranged for their benefit by the Ladies' Committee. Philadelphia has many places of historic and other interests, which will make this years program especially attractive to them.

Pre-assembly and post-assembly clinics will be held in the Philadelphia Hospitals on Saturday, October 29 and Saturday, November 5.

It is very important that you make your hotel reservation early by writing Mr. Thomas E. Willis, Chairman of the Hotel Committee, Chamber of Commerce Building, 12th and Walnut Streets, Philadelphia, Pa.

The Association, through its officers and members of the program committee, extend a very hearty invitation to all members of the profession in good standing in their state and provincial societies to attend the Assembly. The registration fee is \$5.00.

Speakers on the program will include:

Dr. G. Harlan Wells, Philadelphia; Dr. Frank R. Ober, Boston; Dr. Fred Rankin, Lexington, Kentucky; Dr. Herman L. Kretschmer, Chicago; Dr. Henry A. Christian, Boston; Dr. Chevalier Jackson, Philadelphia; Dr. Elliott C. Cutler, Boston; Dr. Russell L. Haden, Cleveland, Ohio; Dr. E. Kost Shelton, Los Angeles; Dr. William D. Haggard, Nashville, Tennessee; Dr. Cyrus C. Sturgis, Ann Arbor, Michigan; Dr. Alfred W. Adson, Rochester, Minnesota; Dr. George Blumer, New Haven, Connecticut; Dr. William Cone and Dr. William G. Turner, Montreal, Quebec, Canada; Dr. Nicholson J. Eastman, Baltimore, Maryland; Dr. Eldridge L. Eliason, Philadelphia; Dr. William H. Erb, Philadelphia; Dr. Richard B. Cattell, Boston; Dr. Frederick J. Kaltefleiter, Philadelphia; Dr. Robert S. Dinsmore,

Cleveland, Ohio; Dr. A. Carlton Ernstene, Cleveland, Ohio; Dr. Edmond M. Eberts, Montreal, Quebec, Canada; Dr. William E. Lower, Cleveland, Ohio;

Dr. Howard C. Naffziger, San Francisco; Dr. James H. Means, Boston; Dr. George A. Harrop, New Brunswick, New Jersey; Dr. Paul D. White, Boston; Dr. Arthur C. Christie, Washington, D. C.; Dr. Chevalier L. Jackson, Philadelphia; Dr. Charles W. Mayo, Rochester, Minnesota; Dr. Samuel F. Haines, Rochester, Minnesota; Dr. Floyd E. Keene, Philadelphia; Dr. John C. Gittings, Philadelphia; Dr. Fred J. Hodges, Ann Arbor, Michigan; Dr. Robert M. Bartlett, Ann Arbor, Michigan; Dr. Thomas H. Russell, New York, N. Y.; Dr. Walter E. Dandy, Baltimore, Maryland; Dr. Claude F. Dixon, Rochester, Minnesota; Dr. Elliott P. Joslin, Boston; Dr. Oliver S. Ormsby, Chicago; Dr. William Darrach, New York, N. Y.; Dr. George Crile, Cleveland, Ohio; Dr. John S. Coulter, Chicago; Dr. William F. Braasch, Rochester, Minnesota; Dr. William S. Middleton, Madison, Wisconsin; Dr. Perrin H. Long, Baltimore, Maryland; Dr. George P. Muller, Philadelphia; Dr. Claude S. Beck, Cleveland, Ohio; Dr. W. Wayne Babcock, Philadelphia; Dr. Robert F. Ridpath, Philadelphia; Dr. Irvine McQuarrie, Minneapolis; Dr. Dean Lewis, Baltimore, Maryland; Dr. Alfred Stengel, Philadelphia; Dr. Peter T. Bohan, Kansas City, Missouri; Dr. Clay Ray Murray, New York, N. Y.; Dr. Warfield T. Longcope, Baltimore, Maryland; Dr. Charles Gordon Heyd, New York, N. Y.; Dr. Vernon C. David, Chicago; Dr. George E. Pfahler, Philadelphia; Dr. Eric Oldberg, Chicago; Dr. John J. Moorhead, New York, N. Y.; Dr. Wilder Penfield, Montreal, Quebec, Canada; Dr. Walter I. Lillie, Philadelphia; Dr. Fred M. Smith, Iowa City, Iowa; Dr. Clarence B. Farrar, Toronto, Ontario, Canada; Dr. John H. Musser, New Orleans; Dr. Louis H. Clerf, Philadelphia; Dr. Hubley R. Owen, Philadelphia; Dr. Frank Lahey, Boston; Dr. David Riesman, Philadelphia; Dr. John F. Erdmann, New York, N. Y.; Dr. M. N. Smith-Petersen, Boston; Dr. Waltman Walters, Rochester, Minnesota; Dr. Loyal Davis, Chicago; Dr. Hugh H. Young, Baltimore, Maryland; Dr. Leonard G. Rowntree, Philadelphia; Dr. Arthur R. Metz, Chicago; Dr. Robert G. Torrey, Philadelphia.

#### A. P. H. A. MEETING

The Sixty-Seventh Annual Meeting of the American Public Health Association will be held in Kansas City, Missouri, from October 25 to 28.

The program comprises fifty morning and afternoon meetings arranged by the ten Sections of the Association which are: Health Officers, Laboratory, Vital Statistics, Public Health Engineering, Industrial Hygiene, Food and Nutrition, Child Hygiene, Public Health Nursing, Epidemiology. Special sessions are planned on Public Health Aspects of Medical Care, Oral Hygiene, Professional Education and Diphtheria Immunization. A public meeting under the auspices of the Local Committee is scheduled for Wednesday evening, October 26 with Dr. E. V. McCollum discussing Milk Pasteurization and Dr. Arthur T. McCormack on New Responsibilities of the Health Officer. There will be symposia on industrial hygiene administration, venereal disease control, laboratory diagnostic methods, expanding responsibilities in public health engineering, maternal and child health, frozen desserts, industrial hazards, water and sewage, typhoid fever, the next steps in school health services, milk and dairy products and many other important subjects.

A few of the well-known names on the program are as

follows: Colonel A. Parker Hitchens, Dr. Earle G. Brown, Dr. Haven Emerson, Surgeon-General Thomas Parran, Joel I. Connolly, Dr. Nina Simmonds, Dr. Karl F. Meyer, Dr. Walter Clark, Professor C. E. A. Winslow, Dr. George C. Ruhland, Dr. William A. Sawyer, Dr. Walter H. Eddy, Dr. Frank G. Boudreau, Sol Pincus, Dr. Martha M. Eliot, Dr. Abel Wolman, Dr. Robert S. Breed and Dr. Felix J. Underwood.

Any members of the Society who desire to attend are invited to do so.

#### CANCER COURSE

The Kansas State Board of Health recently issued the following report of attendance at the postgraduate course on cancer sponsored by that organization in conjunction with the Society Committee on Control of Cancer:

Marysville—45.  
Beloit—68.  
Colby—46.  
Dodge City—40.  
Kingman—53.  
Chanute—62.

The speaker for the course was Dr. Nathan A. Womack, Director of the Tumor Clinic of Barnes Hospital, St. Louis, Missouri.

Plans are now being made for Dr. Womack to present a second course on this subject in six other towns of the state during next February or March.

#### INDIGENT MEDICAL CARE

Several Kansas counties have instituted county medical society indigent medical care plans during the past month.

Suggestion is made that all counties interested in changing their present method of indigent medical care should consult the report recently issued by the indigent medical care committee of the Kansas State Board of Social Welfare.

The report contains the following recommendations which should be of assistance in this regard:

"Resolved that in the opinion of this committee the most feasible and desirable county plan for supplying medical care to public assistance recipients is by means of a contract between the county board of social welfare and the members of the county medical society organization, collectively or individually; the physicians included in the contract to be compensated for their services on a lump sum or controlled fee schedule basis by the county board of social welfare."

"Resolved that in the opinion of this committee the effectiveness of any county medical plan or program can be increased by the establishment of a committee of physicians selected by the medical society which can function as a liaison committee between the county board of social welfare and the physicians practicing medicine within the county."

#### VENEREAL DISEASE REPORTING

Dr. Arthur D. Gray, Chairman of the Committee on Venereal Disease, has prepared the following description of a new plan of venereal disease reporting recently adopted by the Kansas State Board of Health:

Several months ago during the period the writer was engaged in delivering a series of talks on venereal disease to the physicians of Kansas, it was apparent that a number



of procedures having to do with venereal disease control and treatment could be improved upon. One was the method of reporting cases of syphilis and gonorrhea to the Kansas State Board of Health. That such cases should be reported promptly is obvious, since it is important not only for statistical purposes but also because the reported cases formed the basic data upon which federal funds are allotted to the State Board of Health and in turn to the medical profession in Kansas. On the other hand, it is equally obvious that it should be made as convenient as possible for the busy practitioner to file these reports.

Taking all this into consideration, the State Board of Health and the Committee on Venereal Disease of the State Society have collaborated on the development of an entirely new report form. These forms are off the press and very shortly will be forwarded to each doctor of medicine in Kansas.

The new forms are bound in books of ten pages. Each page consists of a permanent stub to which is attached two cards perforated for easy detachment and all bearing a duplicate serial number. The first card is torn off and used to report the case. The data on this card is arranged to require a minimum amount of writing on the part of the reporting physician. The second card is to be used to notify the Board of Health if the patient discontinues treatment or refuses to cooperate with the physician. It is understood, of course, that the State Board of Health will avoid taking any action that may react upon the professional relationship of the physician to his patient; or violate the confidential nature of the information.

The remaining portion of the page, the permanent stub, is for the convenience of the reporting physician and should be filled out with a duplicate of the essential data sent in on the original report card. Space is also provided for a record of the treatments given the patient. Bearing the corresponding serial number appearing on the report card, it furnishes a means of identifying the patient when the physician writes in for additional drugs for the treatment of a case.

There is a pocket in the back of each book containing franked envelopes for mailing in the report cards and also a stamped card for ordering additional books or reporting cases which have discontinued treatment.

Considerable time and thought has been given to making these new forms as efficient and convenient as possible. Certainly they call for a minimum of effort on the part of the reporting physician and it is to be sincerely hoped that the result will be a marked increase in the number of cases of venereal disease reported to the Kansas State Board of Health.

## COMMITTEE MEETINGS

The following are the minutes of the committee meetings held recently:

### MINUTES

of the

### MEETING OF THE COMMITTEE ON MATERNAL AND CHILD WELFARE

September 18, 1938.

A meeting of the Committee on Maternal and Child Welfare was held in Wichita on September 18. Members present were—Dr. Clyde Meredith, Emporia; Dr. Porter Brown, Salina; Dr. H. R. Ross, Topeka; Dr. B. I. Krehbiel, Topeka; Dr. Howard Clark, Wichita; and Dr. Ray A. West, Wichita. Dr. W. A. Grosjean and Dr. L. A. Calkins, other members

of the Committee were unable to attend.

The meeting was called to order by Dr. West, Chairman, following which Dr. Ross gave a very interesting talk on The Outline of Childrens Health Program and the State Nursing Program.

The following sub-committees were appointed by the chair; each to work individually on the various projects covered in the agenda and to be reported on at the next meeting.

"Assistance to the Kansas State Board of Health in the presentation of Social Security Act post-graduate courses on obstetrics and pediatrics. Conferences with representatives of Kansas State Board of Health on other Maternal and Child Welfare portions of the Social Security Act."

Dr. L. A. Calkins and Dr. H. R. Ross.

"Preparation of a more practical and efficient Kansas immunization program, and assistance in having the program adopted throughout the State. Study of compulsory vaccination laws. Other assistance on present Kansas small pox record."

Dr. W. A. Grosjean and Dr. H. R. Ross.

"Study of Kansas Maternal and infant morbidity and mortality statutes, and of reporting regulations upon which these are based. Recommendations thereon to Kansas State Board of Health and to the county medical societies."

Dr. H. R. Ross and Dr. L. A. Calkins.

"Study of present quarantine regulations and of present regulations pertaining to the reporting of communicable diseases. Recommendations thereon to Kansas State Board of Health and to the county medical societies."

Dr. B. I. Krehbiel, Dr. Clyde Meredith, and Dr. H. R. Ross.

"Preparation of a pamphlet for physicians on obstetrics and pediatrics."

"Assistance on problem of Wassermanns for expectant mothers."

"Study of time payment plans for obstetrics and pediatrics and of Kansas obstetrical fees."

"Study of present status of analgesia and barbiturates etc., in obstetrics and recommendations thereon."

Dr. Porter Brown, Dr. Howard Clark, Dr. C. Meredith, and Dr. B. I. Krehbiel.

A motion was made by Dr. Brown seconded by Dr. Meredith and carried:

That an announcement be carried in the next issue of the Journal explaining specifically the policy of the State's Laboratory with regard to free Wassermann tests for expectant mothers.

A motion was made by Dr. Krehbiel seconded by Dr. Meredith and carried:

That in order to obtain a wider distribution of the Mothers Manual, that a copy be mailed to each physician in the State, also to each county superintendent together with a letter explaining the fact that these manuals will be sent free of charge to any physician or welfare organization requiring them for the purpose of distribution to patients.

Dr. Meredith was appointed by the Chair as a Committee of one to co-operate with Mr. Munns in carrying out this project.

After considerable discussion of a questionnaire submitted by Dr. Edwin F. Daily, Director of Maternal and Child Welfare, Health Division a motion was

# IN FOOD VALUE

## *It's Nutrient Content*

### PROPERTIES OF KARO

Uniform composition  
Well tolerated  
Readily digested  
Non-fermentable  
Chemically dependable  
Bacteriologically safe  
Hypo-allergenic  
Economical

### COMPOSITION OF KARO

(Dry Basis)

Dextrin.....	50%
Maltose.....	23.2%
Dextrose.....	16%
Sucrose.....	6%
Invert sugar .....	4%
Minerals.....	0.8%

### KARO EQUIVALENTS

1 oz. vol.....	40 grams
	120 cal.
1 oz. wt. ....	28 grams
	90 cal.
1 teaspoon ....	15 cal.
1 tablespoon ...	60 cal.

The values of an infant food can only be judged by composition. Otherwise gross errors in infant feeding occur. When you consider that volume for volume, Karo Syrup furnishes *twice* as many calories as a similar sugar modifier in powdered form, you realize *how* strongly saturated Karo is in calories of maltose-dextrins-dextrose.

*Infant feeding practice is primarily the concern of the physician, therefore, Karo for infant feeding is advertised to the Medical Profession exclusively.*



### **FREE to Physicians only:**

Convenient Calculator of Infant Feeding Formulas; accurate, instructive, helpful. On receipt of Physician's prescription blank, giving name and address, the Calculator will be forwarded. Write Corn Products Sales Co., Dept. SJ-10 17 Battery Place, New York, N. Y.



made by Dr. Brown seconded by Dr. Clark and carried:

That in order to facilitate the more accurate study of State wide maternal mortality rates, that this questionnaire be adopted for use in the State Board of Health with the following additions:

1. Was she delivered by a caesarian section by a general surgeon?

2. Did the attending physician attend any contagious diseases two weeks prior to delivery?

A copy to be mailed to each individual who has signed a birth certificate in the State within past two years and that they be notified that sub-blanks would be required in the future in all cases of maternal deaths.

Meeting adjourned.

MINUTES  
of  
MEETING  
COMMITTEE ON CONSERVATION OF  
EYESIGHT

Lawrence, Kansas—September 25, 1938

A meeting of the Committee on the Conservation of Eyesight was held in Lawrence at the Hotel Eldridge on September 25, 1938. Members in attendance were Dr. Lyle S. Powell, Chairman, Lawrence; Dr. George Gsell, Wichita; Dr. J. G. Janney, Dodge City; Dr. Clifford Mullen, Kansas City; and Dr. W. M. Scales, Hutchinson. Mr. Lawrence Lewis of the Kansas Society for the Prevention of Blindness; Mr. LeRoy Hughbanks of the Division of the Blind of the Kansas State Board of Social Welfare; and Miss Elizabeth Snyder, Representative of the Division of the Blind of the Kansas State Board of Social Welfare as guests; and Clarence G. Munns was present as Executive Secretary.

First item of discussion pertained to cooperation with the Western Electric Company in the supervision of diagnosis of deafness by audiometers. Dr. Kirkpatrick, Dr. Janney, and Dr. Powell were asked to serve as a committee to discuss this matter with representatives of the Western Electric Company.

Reading tests to determine eyesight difficulties of school children was discussed. Dr. George Gsell was asked to make an investigation of possibilities for cooperating in this regard with Kansas schools and to report at the next meeting of the committee.

Decision was made that the committee should write a letter to radio station WIBW in Topeka suggesting certain public health disadvantages involved in advertising presented by the station on behalf of an optical company in Chicago.

Dr. Powell described the committee chairmens meeting held in Topeka on September 11, and outlined the projects assigned to this committee.

Dr. Mullen and Mr. Hughbanks presented reports on the progress made to date under the eyesight restoration program of the Kansas State Board of Social Welfare.

The suggestion was made that the committees should issue a bulletin to all Kansas ophthalmologists suggesting that they carefully comply with the regulations of the Kansas State Board of Social Welfare in the matter of completion of reports and forms.

The motion of Dr. Scales was seconded and carried that the committee recommend to the Kansas State Board of Social Welfare that as soon as possible provision be made for care of glaucoma patients whose vision is better than 20/200.

Upon motion made by Dr. Scales, seconded and carried, it was agreed that the committee should assist Mr. Hughbanks in any way he desires in the completion and conduct of the Kansas State Board of Social Welfare survey of blindness in Kansas.

Dr. Mullen was asked to forward monthly reports to the committee outlining progress made under the restoration of eyesight program.

Discussion followed concerning the advisability of holding a state-wide postgraduate course on diagnosis of eye conditions. Dr. Janney was asked to make any preparations which he thinks are advisable in this connection.

Decision was made that the present eye, ear, nose and throat section in the Journal should be continued, and a request was made that the members of the committee assist in obtaining material for the section.

Dr. George Gsell was asked to cooperate with the Kansas Society for the Prevention of Blindness in studying ways and means for providing additional sight saving classes in Kansas.

The pamphlets on conservation of eyesight published by the committee last year were discussed and Mr. Hughbanks was asked to attempt to make arrangements for any reprints of these pamphlets which might be needed.

MINUTES  
of the  
MEETING  
SCHOOL OF MEDICINE COMMITTEE  
October 5, 1938

A meeting of the School of Medicine Committee was held at the University of Kansas School of Medicine on October 5, 1938. Members of the Committee present were—Dr. F. J. McEwen, Chairman; Dr. L. R. McGill, Hoisington; Dr. L. B. Spake, Kansas City; Dr. L. J. Beyer, Lyons; Dean H. R. Wahl, Kansas City; Dr. N. P. Sherwood, Lawrence; and Dr. O. O. Stoland, Lawrence were present as guests. Clarence G. Munns was present as Executive Secretary.

First item of discussion was the subject of medical economics courses at the University of Kansas School of Medicine. Dean Wahl reported that the course given last year on this subject was deemed to be successful, and that arrangements had been made to continue the course this year. He also reported that Dr. F. L. Loveland, of Topeka, has accepted the appointment as professor of Medical Economics of the school, and that Dr. Loveland will be in charge of plans and preparations for this year's course. The central office was instructed to cooperate in furnishing pamphlets, brochures, packets, or any other types of information Dr. Loveland might desire in this connection.

Dean Wahl and Dr. Stoland, and Dr. Sherwood reported on the legislative needs of the Medical School, and of the premedical departments of the University of Kansas. Decision was made that the committee shall assist in the furtherance of any of these plans which are approved by the Board of Regents.

An item on the agenda pertaining to ways and means in which the committee can assist in obtaining additional funds for medical research at the Medical School was tabled until the next meeting of the committee.

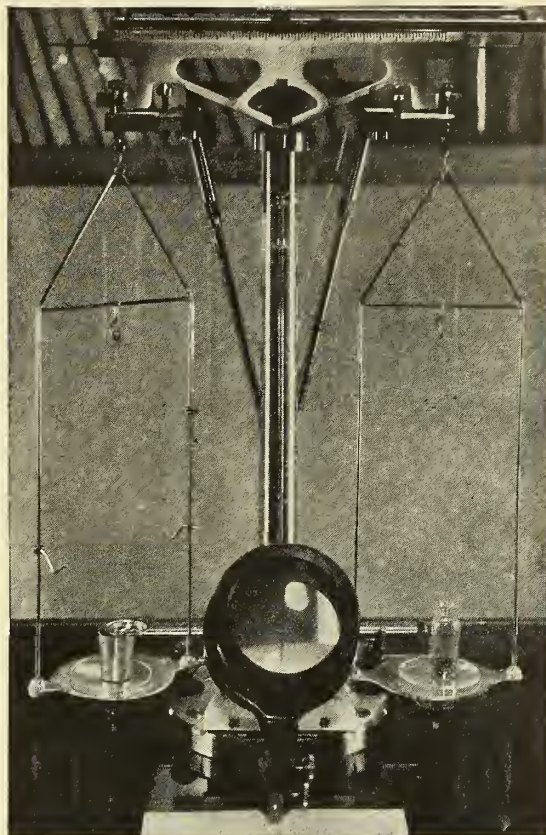
Dean Wahl was asked to prepare a report for the next meeting upon the following questions pertaining to requirements for admission at the University of

# DELICATELY BALANCED

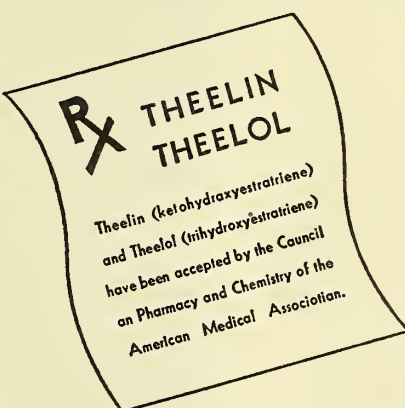
Throughout woman's reproductive years a delicate balance is normally maintained between ovarian and other hormones.

Diminution of the ovarian function disrupts this endocrine balance, and is considered to be the cause of the vasomotor and psychic reactions characteristic of the menopause. Theelin and Theelol, crystalline estrogenic substances, supplementing or replacing the deficient ovarian function, are of proven value in controlling menopausal symptoms during the period of endocrine re-adjustment.

For initial relief of menopausal symptoms injection of Theelin in Oil, 2000 international units, two or three times



weekly, is suggested. This may be supplemented by use of Theelol Kapsels by mouth or Theelin Suppositories (vaginal) during the intervals between injections. After the symptoms have been brought under control, dosage may be gradually reduced.



Theelin in Oil Ampoules in potencies of 1000, 2000 and 10,000 international units each, and Theelin Ampoules (Aqueous), 200 units, are supplied in boxes of six and fifty 1-cc. ampoules. Theelin Vaginal Suppositories, 2000 international units each, are supplied in boxes of six. Theelol Kapsels of two strengths, 0.06 milligram and 0.12 milligram, are supplied in bottles of 20, 100 and 250.

*The World's Largest Makers of Pharmaceutical and Biological Products*

## PARKE, DAVIS & COMPANY

DETROIT



MICHIGAN



## Kansas hospitals:

1. What are the requirements for admission of indigent persons—both individual and county patients?
2. To what extent do counties avail themselves of this service? What amounts do counties pay? To what extent does this compete with the institution or successful operation of county indigent plans.
3. How many non-indigent patients are admitted? What do they pay? To what extent does this compete with private hospitals?
4. Do any patients pay fees to staff members? If so, how much and upon what basis?

Dean Wahl reported concerning the present colored student discussion, and stated that he felt the problem would be solved next year upon completion of a colored ward for the University of Kansas hospitals.

Dean Wahl was asked to report at the next meeting on the general subject of student admittance at the medical school.

The committee requested Dean Wahl to assist the Editorial Board in providing any scientific material desired by the Board for publication in the Journal, and requested that the Board correspond with Dean Wahl in this connection.

The possibility of antivivisection measures in the next legislature was discussed, and Dean Wahl, Dr. Stoland, and Dr. Sherwood were asked to prepare information on this subject.

Decision was made that the project of preparation of pamphlets, articles, radio talks, etc., by students for Society committees is not practical.

Instruction was given to the central office to invite Dr. Stoland and Dr. Sherwood to attend future meetings of this committee.

Decision was made that the committee shall hold its next meeting in Emporia during the early part of December.

Adjournment followed.

MINUTES  
of the  
MEETING

AUXILIARY COMMITTEE

October 5, 1938

A meeting of the Auxiliary Committee was held in Kansas City, Kansas, on October 5, 1938. Members of the Committee present were—Dr. Omer C. West, Chairman; Dr. Omer M. Raines, Topeka; Clarence G. Munns was present as Executive Secretary.

Foremost item of discussion was ways and means in which the Auxiliary can increase the effectiveness of its program. Decision was made that Dr. West shall confer with the Auxiliary Board at its next meeting about the following possibilities:

1. That arrangements be made to appoint an official representative of the Auxiliary in each county where no Auxiliary organization now exists in order that the Auxiliary may have representation in each county in the state.
2. That if this is deemed practical and advisable a series of bulletins be forwarded to each Auxiliary organization, and official representative outlining programs which they can accomplish.

It was agreed that Dr. West will report on this possibility at the next meeting of the committee, and that the program for the coming year will be prepared and discussed at that meeting.

Adjournment followed.

Meetings of the Committee on Control of Cancer, Public Health and Education, Medical Economics and Maternal and Child Welfare, are to be held during the latter part of October and the first part of November.

MINUTES

of the

MEETING OF THE COMMITTEE ON TUBERCULOSIS

September 18—Wichita

A meeting of the Committee on Tuberculosis was held in Wichita on September 18.

The meeting was called to consider plans for the coming year's activities and to finish any business left over from last year. Dr. Lerrigo felt that there was a great need in standardizing x-ray films and pneumothorax technique. In order to help defray the expenses of maintaining refills at home, Dr. Hall suggested that the county commissioners pay for them at the same rate as if the patient were in the sanatorium. A great need was expressed by the committee members for periodic x-ray checking-up at intervals of two months. Dr. Gench stated that his county pays \$2.50 per refill and \$2.50 per x-ray film.

Last year's postgraduate course financed by the Kansas Tuberculosis and Health Association was reviewed and although there were not as many doctors in attendance as would have been desired, the committee felt that the course was a success. Dr. Lerrigo stated that he would be in favor of repeating another course of postgraduate study, but that perhaps concentrating efforts at the large meetings in the state and furnishing an outstanding speaker might reach a larger group of doctors and make the course much more worth while. With this idea in mind it was suggested that the program chairman be approached and an outstanding speaker be offered to the Sedgwick County Clinical Society meeting, the Southeast Kansas Medical Society meeting, the Golden Belt Medical Society meeting, the Ford County Medical Society meeting, and the Northwest Kansas Medical Society meeting. It was also recommended that the state program chairman be interviewed and offered the services of an outstanding specialist so that a comprehensive survey of tuberculosis could be included on the State Meeting Program for next year. The committee further felt that a one day clinic and postgraduate course should be held at Bell Memorial Hospital and supervised by some outstanding lecturer. It was suggested that this course consist of the modern methods of treatment of tuberculosis by clinical demonstration of pneumo-thorax, operative technique, x-ray interpretation, and lectures. A sub-committee was appointed consisting of Dr. Gench and Dr. Lerrigo to confer with Dr. Davidson, president of the Wyandotte County Medical Society as to the possibility of such a course. Dr. Musson was asked about the attitude of the Kansas State Board of Health in this matter and he felt the Board might be able to cooperate to make this course outstanding.

The matter of county medical society tuberculosis projects was discussed and the committee felt that a qualified list of speakers on the various aspects of tuberculosis diagnosis and treatment should be compiled and sent to the county societies for tuberculosis to be included in one of their programs for the coming year. This list should be open and include men



*The experience  
of many specialists  
is embodied in every*  
**CAMP SUPPORT**

WHEN a chemist prepares a formula he must know the content and purpose of every ingredient used. In the same way, S. H. Camp & Company are thoroughly versed in every detail that contributes to the efficiency of a Scientific Support. The quality of the exclusive fabrics—the spacing of eyelets, the intricate lacing, the resiliency of the garters, the effectiveness of each tiny snap—all are subjected to expert analysis and careful laboratory research before they are accepted.

The anatomical correctness of each Camp garment is assured through the cooperation and advice of specialists in each branch of the profession. For example, the sacro-iliac support illustrated was designed and constructed on advice of leading orthopedic specialists. Two sets of lacers with separate adjustments assure increased tightness low on the trunk and such staying power as is required above. Camp Maternity Supports are the result of constant research work and consultation with obstetricians. In addition to protecting the abdominal walls, back and pelvis from strain, Camp Maternity Supports help the patient maintain her balance. Camp Supports for postoperative, mammary gland, visceroptosis, hernial and other conditions are based on similar expert knowledge.

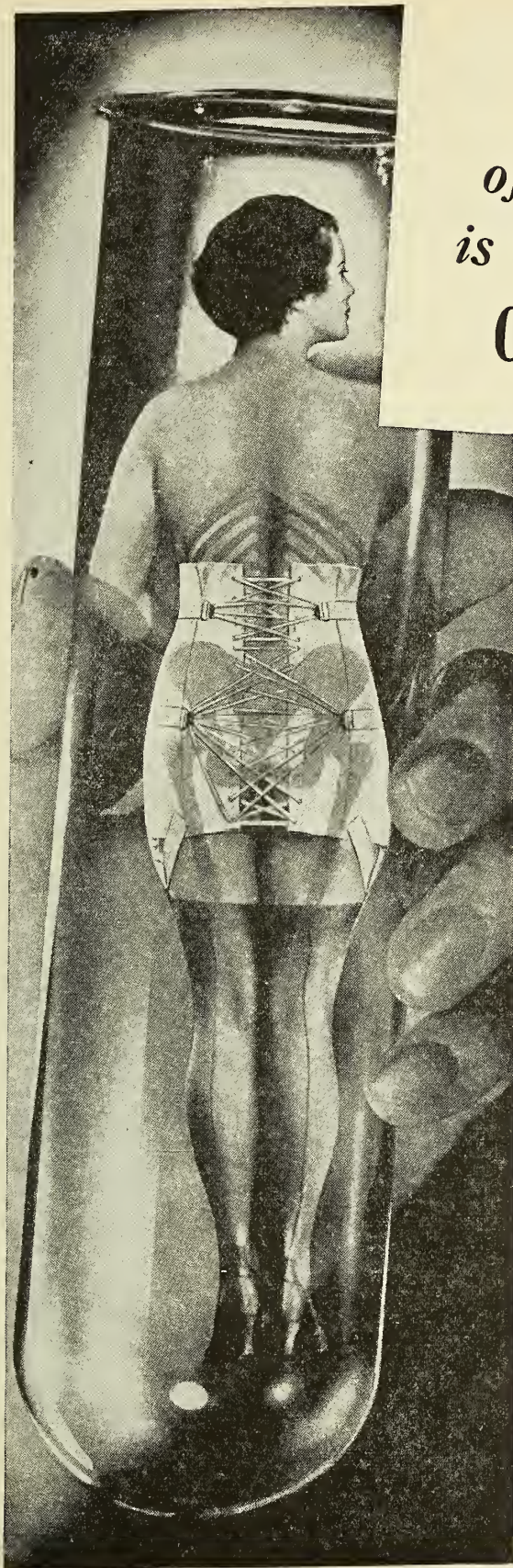
As a result of this thorough, painstaking policy of seeking authoritative advice on even the small details, Camp Supports are approved by the American College of Surgeons and accepted by the Council on Physical Therapy of the American Medical Association.

**CAMP** TRADE MARK *Supports*

**S. H. CAMP & COMPANY  
JACKSON, MICHIGAN**

OFFICES IN:

New York, Chicago, Windsor, Ont., London, Eng.  
World's largest manufacturers of surgical supports





willing and qualified to speak on their respective subjects.

The next business to be considered was the tuberculosis sanatorium facilities available in the state and recommendations of the committee to the legislative body of what added facilities are needed and possibly where they should be located. Dr. Hall stated that those states that have more than two beds per annual death have shown a greater decrease in tuberculosis mortality than those states with fewer than two beds per death. The beds available: Wichita, 60; Norton, 510; Leavenworth, 70; Topeka, 60; Bell Memorial, 30; Total, 730. Estimated needed beds: 400 to 450.

Dr. Tihen suggested that the needed beds be divided into two units, one unit of two hundred beds to be located as an added unit at Bell Memorial Hospital and another unit of two hundred or two hundred and fifty beds be located in Wichita or Southeast Kansas. Dr. Musson suggested that the committee draw up a criterion to present to this legislature in helping them to decide where the location should be, the criteria to include incidence of morbidity, center of population, railroad facilities and accessibility, outside hospital and special medical facilities.

The committee considered the question of whether general hospitals should be urged to admit tuberculosis patients. There was divided opinion among the members and this question was left open until a future meeting.

Dr. Taylor felt that a statute should be fostered in the sanatorium legislature whereby the county commissioners will be able to provide care for active tuberculosis cases on the recommendation of the county health officers. Dr. Gench believed that sufficient legal authority already exists for this and Dr. Musson was asked to report at the next meeting on the matter. Dr. Hall was in favor of making the sanatorium charge the same to an individual as to county commissioners.

A motion was made by Dr. Gench and seconded by Dr. Musson that the committee approve the work done at the Legionville Preventorium and that it endorse the proposal that the state take over the facilities offered by the American Legion and operate them for the benefit of child welfare. This was unanimously adopted.

Agreement was had that the next meeting of the committee shall be held during November in Topeka.

The meeting adjourned.

### HOUSE OF DELEGATES MEETING

The House of Delegates of the American Medical Association met in Chicago on September 16 and 17, 1938, for consideration of the proposed National Health Program.

The following is a report of the meeting:

Dr. H. H. Shoulders, Speaker of the House, set forth the following facts in his address: "The House of Delegates has never displayed an attitude of opposition to study and experimentation with plans for the financing of medical care by individuals or by the government. To the contrary, the House adopted principles, ten in number, to which all plans should conform. . . . They were adopted because we believe they are essential to good medical care. . . . We have never taken action in opposition to government aid to the needy, whether the need was for food, clothing, shelter, or medical attention. We have

opposed the administration of these benefits, and especially medical benefits, on a basis that would be violence to our whole idea of democracy. We have opposed legislation which would have the effect of vesting in some governmental agency the power to enforce its decrees on patients and doctors. We have never opposed provisions in any regulation or statute to protect the government and taxpayers against fraud on the part of any one. . . . This House of Delegates has not assumed to answer for the taxpayers of the United States the question as to whether or not they wish to assume the financial burden of financing the complete and adequate medical care of all indigent persons as a government function. . . . We remember the fact that human nature is just about the same as it was two thousand years ago. It has the same virtues and faults; the same generosity and the same greed; the same loves and hates; the same hopes and the same fears. Our vision must see through all these conflicting attributes of human nature and with thoughts tempered with a high sense of justice and charity find a way that will lead us out of these troubled times to happier days."

Dr. Irvin Abell, President of the Association, opened his address by quoting Article 2 of the Constitution of the American Medical Association and Section I, Chapter I, of the Principles of Medical Ethics, as follows: Article 2—"The objects of the Association are to promote the science and art of medicine and the betterment of public health". Section I, Chapter I,—"A profession has for its prime object the service it can render to humanity: reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession, an individual assumes an obligation to conduct himself in accord with its ideals." Dr. Abell continued by briefly reviewing some of the fundamental, altruistic principles of the American Medical Association. He pointed out that there was need for wider dissemination of accomplishments; he set out the policies of the A. M. A.; he spoke of the experimentation with new forms of practice, care of the indigent, state interference with medical practice, the fact that medicine has never entered into politics, the personal relationship between doctor and patient and concluded with the following paragraph: "When your decision is made during this special session of the House of Delegates, it will be broadcast by the press and by your own organs of expression to the people and the medical profession in this country. The principles and policies which we have thus far established do not forbid, nor have they ever contemplated, any opposition to a well considered, expanded program of medical service when the need can be established. Neither is there any fundamental principle or policy which in any manner opposes aid to the indigent or the medically indigent if their indigence can be established. The principles and policies which this House of Delegates has adopted in the past have been developed with the single purpose of maintaining the quality and standards of medical care. To these high ideals I would urge you again to adhere. I would urge you also to consider seriously the obligation which rests on you, so that you may speak, when you do speak, with a united voice, and so that by and with your leadership the physicians of this country may also speak with a united voice in behalf of greater medical service and a greater medical profession."

Dr. Rock Sleyster, President-Elect, stated in his address, that the medical profession has given a million dollars a day in free service; has made rapid advance far above any other science in the last half century; has brought social benefits promptly and unselfishly to the uses of the public;

## REPRINT PRICE LIST

Reprints from articles in the  
**KANSAS MEDICAL JOURNAL**

All Reprints are made the same size as  
Journal pages,  $7\frac{3}{4} \times 10\frac{1}{2}$  inches.  
Transportation charges on reprints are  
to be paid by the Author

No. Copies	Pages	Without Cover	With Cover
100.....	4	\$ 9.00	\$12.25
250.....	4	9.75	14.50
500.....	4	11.00	17.50
1000.....	4	18.00	26.00
No. Copies	Pages	Without Cover	With Cover
100.....	8	\$12.50	\$16.00
250.....	8	14.00	18.00
500.....	8	16.00	23.00
1000.....	8	21.00	32.00
No. Copies	Pages	Without Cover	With Cover
100.....	12	\$16.00	\$20.50
250.....	12	18.25	23.50
500.....	12	21.25	28.25
1000.....	12	28.00	39.00

**CAPPER PRINTING CO.**

Capper Building,  
**TOPEKA, KANSAS**

## Ambulance Service

To which you may  
trust your most  
gravely ill patient

NEW AMBULANCES  
TWO TRAINED ATTENDANTS

*Rates: 15c a mile to any point in Kansas—  
everything included*

**WALL-DIFFENDERFER  
MORTUARY**

Topeka,  
Kansas.

723 West 6th  
Phone 3-2326

# RADIUM

## —FOR RENT

for the individual case, at the basic rate  
of \$14.00 for the use of 50 milligrams for  
30 hours or less. Special delivery  
Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or  
more, on a yearly basis. Rate is \$22.50  
per month for 50 milligrams, including  
insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in  
history.

**RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE**

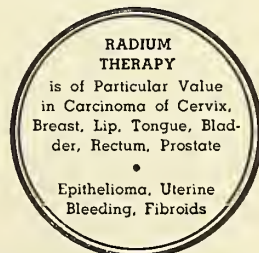
The complete service for Radium users

For details, address

**RADIUM AND RADON CORPORATION**

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

**CHICAGO**





and because American Medicine has never stood still, the people should be very proud not only of their own local physicians but of the A. M. A. and the ideals and ethics for which it stands. Dr. Sleyster concluded his address with the following remarks: "In peace or in war, the medical profession has never failed the people of our country. It will not fail them now. Their needs are our needs, and they will be met as they have always been met by those who, through daily contact and care of the sick, know these needs better than any one else. Our records are an open book and we invite full comparison of unselfish and efficient public service with any other agency."

Numerous resolutions from the various state societies and the individual members of the House of Delegates were referred to reference committees for study. A resolution of particular interest to Kansas members was the one introduced by Dr. H. L. Snyder, Winfield. Unfortunately space does not permit a reproduction of this entire resolution. However, a summary is as follows:

"Health is fundamental for the happiness and welfare of any people" were the opening words of Dr. Snyder's paper. He pointed out that the economic situation of an individual or group has a definite relationship to health, medical needs and medical service. He further stated that "The problems incident to the preservation of health and provision of medical care naturally divide themselves into two categories. There are first those problems usually referred to under the terms 'public health' or 'preventive medicine', and second those which involve the health of the individual citizen and his ability to secure good medical care". Dr. Snyder continued by setting forth the following six subjects to be dealt with in the health program: 1. Public Health as a National Problem. 2. Organization of Health Activities Within the Federal Government. 3. Medical Care of the Individual Citizen. 4. Medical Care for the Middle Income Class. 5. Discussion of Compulsory Health Insurance, and 6. Medical Care of the Indigent. Number 1 points out the need for local government, municipal, county and state assistance in health problems rather than federal government, inasmuch as their contact is more personal and specific. Maternal and child welfare, venereal disease, contagious disease, and other curative procedures must be cared for by the profession, whose leadership must be recognized and encouraged. Number 2 sets forth the excellent work done by the United States Public Health Service and states that "the time has arrived when, after exhaustive study, the place of the federal government in health activities should be defined, a definite policy adopted and an efficient organization established." Number 3 enumerates three classes of citizens—those whose economic resources are equal to all demands, ordinary and extraordinary; the middle class, able to meet ordinary demands but very likely to be economically swamped by prolonged or highcost illnesses; and the class who are unable to pay for any medical service whatsoever. The first is able to take care of themselves, but the latter two need separate consideration. Number 4 dealing with the middle class group, advocates helping the citizen to help himself and avoiding paternalism. The A. M. A. survey now in progress, will help in this problem to determine the medical needs of the people with a view toward assistance in this matter. He opposes governmental subsidy in any form and believes that unsound cooperative methods of voluntary health insurance lead to adoption of compulsory health insurance with its inevitable accompaniment of government subsidy. Number 5 is a discussion of the facts about compulsory health insurance and sets out reasons why the profession would not foster any system of that kind. Number 6 contains nine points as

to Dr. Snyder's position on health and medical care concluding with the following: "We believe that public health and medical service as a whole will suffer and deteriorate through the application of regimented and governmentally controlled methods of medical practice, and we are convinced that the public health of the nation can best be maintained through continuation and advancement of the present individualist practice of medicine."

Other resolutions were introduced on the following topics: A Recommendation for a Conference to formulate a working agreement for compensation for medical care; a plan pertaining to distribution of medical care; a recommendation regarding plans for financing care of the indigent sick; Delegation of responsibility for a public announcement of the plans recommended by the House of Delegates; A proposed substitute for Title VI of the Social Security Act; Recommendations regarding appointment of special executive committee; A plan for publicity against regimentation of physicians presented by the West Virginia Medical Society; A recommendation regarding cooperation for needed improvements in caring for the indigent sick; The Missouri plan for medical care of all the people; A recommendation from the Medical Society of the State of Pennsylvania; A plan from New Jersey for the care of the indigent; The appointment of a committee to study data and plans for the program; A change of medical care for the people presented by the California Society; and the action of the Medical Society of Virginia.

Another happening of interest to Kansas members was the appointment of Dr. Snyder on one of the divisions of the general reference committee.

Final action of the House of Delegates was expressed in the following resolution adopted unanimously:

"Since it is evident that the physicians of this nation, as represented by the members of this House of Delegates convened in special session, favor definite and decisive action now, your committee submits the following for your approval:

1. Under Recommendation I on Expansion of Public Health Services: (1) Your committee recommends the establishment of a federal department of health with a secretary who shall be a doctor of medicine and a member of the President's cabinet. (2) The general principles outlined by the Technical Committee for the expansion of Public Health and Maternal and Child Health Services are approved and the American Medical Association definitely seeks to cooperate in developing efficient and economical ways and means of putting into effect this recommendation. (3) Any expenditures made for the expansion of public health and maternal and child health service should not include the treatment of disease except so far as this cannot be successfully accomplished through the private practitioner.

2. Under Recommendation II on Expansion of Hospital Facilities: Your committee favors the expansion of general hospital facilities where need exists. The hospital situation would indicate that there is at present greater need for the use of existing hospital facilities than for additional hospitals.

Your committee heartily recommends the approval of the recommendation of the technical committee stressing the use of existing hospital facilities. The stability and efficiency of many existing church and voluntary hospitals could be assured by the payment to them of the costs of the necessary hospitalization of the medically indigent.

3. Under Recommendation III on Medical Care for the Medically Needy: Your committee advocates recognition of the principle that the complete medical care of the indigent is a responsibility of the community, medical and allied



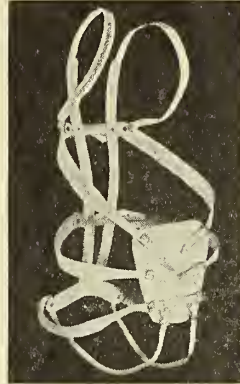
## The Mary E. Pogue School

Established 1903

for exceptional children

Individual instruction for backward and problem children of any age. Separate building for boys. Epileptics accepted. G. H. Marquardt, medical director. W. H. Holmes, consultant. Gerard N. Krost, pediatrician.

Wheaton, Ill. Phone—Wheaton 66  
40 Geneva Road



## THE W. E. ISLE COMPANY

1121 Grand Ave.  
Entire Second Floor  
Kansas City, Mo.  
Victor 2350

A complete orthopaedic  
appliance service.

Your Patients will receive  
prompt, careful attention  
by expert fitters.



## Hotel Jayhawk

TOPEKA ~ KANSAS

Main Dining Rooms and Coffee Shop

Air Conditioned and Refrigerated

Many Private Dining Rooms Available for Special Parties

THE MOSBY HOTEL CO.

N. M. Mosby, Pres. & Gen. Mgr.

## Versatility

PANOPTIK BIFOCALS  
FILL BROAD RANGE OF  
REQUIREMENTS

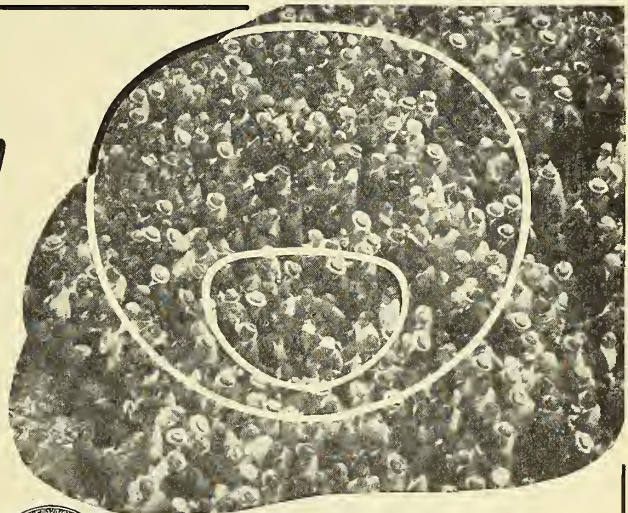
No one knows better than you—that patients have an amazingly wide variety of bifocal requirements. Consequently, it pays to standardize on AO Panoptik Bifocals—because of their outstanding versatility.

Mrs. X, housewife, aged 43, wants to avoid the appearance of wearing bifocals.

Mr. D, physics professor, aged 50, is disturbed by chromatic aberration in scientific observations.

Mr. C, proof reader, 48, has been plagued all his life with headaches because of vertical imbalance introduced by glasses.

Miss H, teacher, 60, fears bifocal "jump."



In every case Panoptik Bifocals fill the requirements. They banish "jump"! They permit control of the position, size and shape of segments. They provide marginal correction vision and eliminate chromatic aberration. For patient satisfaction, AO Panoptiks are recommended by thousands of refractionists the country over. Ask your American Optical Representative for complete details on AO Panoptik Lenses.

**AMERICAN OPTICAL COMPANY**



professions and that such care should be organized by local governmental units and supported by tax funds.

Since the indigent now constitute a large group in the population, your committee recognizes that the necessity for state aid for medical care may arise in poorer communities and the federal government may need to provide funds when the state is unable to meet these emergencies.

Reports of the Bureau of the Census, of the U. S. Public Health Service and of life insurance companies show that great progress has been made in the United States in the reduction of morbidity and mortality among all classes of people. This reflects the good quality of medical care now provided. Your committee wishes to see continued and improved the methods and practices which have brought us to this present high plane.

Your committee wishes to see established well coordinated programs in the various states in the nation, for improvement of food, housing and the other environmental conditions which have the greatest influence on the health of our citizens. Your committee wishes also to see established a definite and far reaching public health program for the education and information of all the people in order that they may take advantage of the present medical service available in this country.

In the face of the vanishing support of philanthropy, the medical profession as a whole will welcome the appropriation of funds to provide medical care for the medically needy, provided, first, that the public welfare administrative procedures are simplified and coordinated; and, second, that the provision of medical services is arranged by responsible local public officials in cooperation with the local medical profession and its allied groups.

Your committee feels that in each state a system should be developed to meet the recommendation of the National Health Conference in conformity with its suggestion that "The role of the federal government should be principally that of giving financial and technical aid to the states in their development of sound programs through procedures largely of their own choice."

4. Under Recommendation IV on a General Program of Medical Care: Your committee approves the principle of hospital service insurance which is being widely adopted throughout the country. It is susceptible of great expansion along sound lines, and your committee particularly recommends it as a community project. Experience in the operation of hospital service insurance or group hospitalization plans has demonstrated that these plans should confine themselves to provision of hospital facilities and should not include any type of medical care.

Your committee recognizes that health needs and means to supply such needs vary throughout the United States. Studies indicate that health needs are not identical in different localities but that they usually depend on local conditions and therefore are primarily local problems. Your committee therefore encourages county or district medical societies, with the approval of the state medical society of which each is a component part, to develop appropriate means to meet their local requirements.

In addition to insurance for hospitalization we believe it is practicable to develop cash indemnity insurance plans to cover, in whole or in part, the costs of emergency or prolonged illness. Agencies set up to provide such insurance should comply with state statutes and regulations to insure their soundness and financial responsibility and have the approval of the county and state medical societies under which they operate.

Your committee is not willing to foster any system of compulsory health insurance. Your committee is convinced that it is a complicated, bureaucratic system which has no

place in a democratic state. It would undoubtedly set up a far reaching tax system with great increase in the cost of government. That it would lend itself to political control and manipulation there is no doubt.

Your committee recognizes the soundness of the principles of workmen's compensation laws and recommends the expansion of such legislation to provide for meeting the costs of illness sustained as a result of employment in industry.

Your committee repeats its conviction that voluntary indemnity insurance may assist many income groups to finance their sickness costs without subsidy. Further development of group hospitalization and establishment of insurance plans on the indemnity principle to cover the cost of illness will assist in solution of these problems.

5. Under Recommendation V on Insurance Against Loss of Wages During Sickness: In essence, the recommendation deals with compensation of loss of wages during sickness. Your committee unreservedly endorses this principle as it has distinct influence toward recovery and tends to reduce permanent disability. It is, however, in the interest of good medical care that the attending physician be relieved of the duty of certification of illness and of recovery, which function should be performed by a qualified medical employee of the disbursing agency.

6. To facilitate that accomplishment of these objectives, your committee recommends that a committee of not more than seven physicians representative of the practicing profession, under the chairmanship of Dr. Irvin Abell, President of the American Medical Association, be appointed by the Speaker to confer and consult with the proper federal representatives relative to the proposed National Health Program."

Members of the Society who attended the session are as follows: Dr. H. L. Snyder, Dr. J. F. Hassig, Dr. N. E. Melencamp, Dr. C. C. Nesselrode, Dr. W. M. Mills, Dr. R. B. Stewart and Clarence G. Munns.

The entire proceedings of the meeting are presented in the September 24 issue of the Journal of the American Medical Association on page 1191 and it is believed the detailed account will be of interest to every member of the Kansas profession.

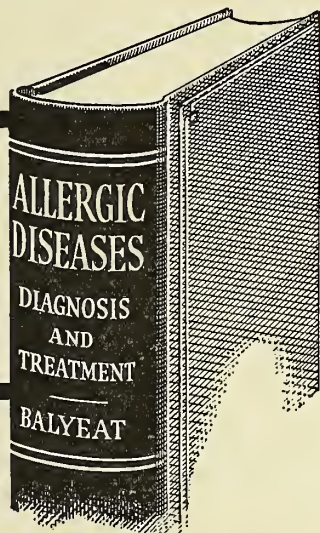
## DEATH NOTICES

Dr. James Scott Cummings, 87 years of age, died at his home in Bronson on August 16. He was born in 1851 and received his medical education at the Cincinnati College of Medicine and Surgery in Cincinnati, Ohio, graduating in 1880. He was a former member of the Bourbon County Medical Society.

Dr. Henry C. Mayer, 74 years of age, died at his home in Junction City on August 5. He had been ill for the past two years. Dr. Mayer was born in Hessen, Darmstadt, Germany, in February 1864, and came to the United States in 1877. He received his medical degree from the Kansas Medical College in 1900 and began his practice in Ellsworth. He later moved to Junction City where he practiced for nineteen years.

Dr. Philip Benjamin Matz, 53 years of age, died in Santa Monica, California, on June 25, 1938. Dr. Matz received his medical education at the Long Island College of Medicine, in Brooklyn, New York, and graduated from there in 1908. At the time of his death he was working in the Research Subdivision, Veterans Administration, in Washington, D. C. He was a member of the Leavenworth County Medical Society.

*Just Off Press* — **NEW (5<sup>th</sup>) EDITION**



*Everyday Applications*  
**FOR THE  
GENERAL PRACTITIONER**

ASTHMA  
SEASONAL HAY FEVER  
PERENNIAL HAY FEVER  
PREVENTIVE MEASURES  
MIGRAINE  
URTICARIA  
ECZEMA  
CONTACT DERMATITIS  
GASTRO-INTESTINAL  
ALLERGY  
ALLERGIC CHILDREN  
FACIAL AND DENTAL  
DEFORMITIES  
CONJUNCTIVITIS

**550 Pages, 6 x 9**

Illustrated with 145 engravings, line drawings and charts, and 8 colored plates.

**CLOTH, \$6.00 NET**

# BALYEAT'S

## ALLERGIC DISEASES

### *Their DIAGNOSIS and TREATMENT*

The many new developments in the field of Allergy are explained and *applied* in this *New (5th) Edition* of Dr. Balyeat's book.

Among the new features are the important advances on the treatment of Hay Fever and Asthma; the use and value of the Leucopenic Index test; an entirely rewritten chapter on the Intratracheal Use of Iodized Oil in the Treatment of Chronic Asthma and Bronchiectasis; Allergy as a cause of Detached Retina, Uretero-Spasm and Hydrarthrosis.

By

**RAY M. BALYEAT, M.D., F.A.C.P.**

Associate Professor of Medicine and Lecturer on Diseases Due to Allergy  
University of Oklahoma Medical School  
Chief of the Allergy Clinic, University Hospital  
President of the Association for the Study of Allergy, 1930-1931  
Director, Balyeat Hay Fever and Asthma Clinic

Assisted by **RALPH BOWEN, M.D., F.A.A.P.**

Chief of Pediatric Section, Balyeat Hay Fever and Asthma Clinic  
Oklahoma City, Oklahoma

Dr. Balyeat's achievements in the field of Allergy are world renowned. His book furnishes the general practitioner with a working guide which stresses the fundamentals of Allergy, simplifies tests, and guides you clearly on *every form of treatment*. Here you have TODAY'S knowledge of Allergy — ready for *application*!

**F. A. DAVIS COMPANY, Medical Publishers**  
**1914 Cherry Street, Phila., Pa.**

SEND at once a copy of the New (5th) Edition of Dr. Balyeat's book, "ALLERGIC DISEASES, THEIR DIAGNOSIS AND TREATMENT." Price, \$6.00.

Name.....

Address.....



Dr. Robert C. Wear, 80 years of age, died at his home in Baxter Springs on September 9, 1938. Dr. Wear was born on a farm near Colchester, Illinois, in 1858, and received his medical degree from the University Medical College of Kansas City, Missouri, in 1885. He began the practice of medicine in Baldwin and later moved to Chehalis, Washington, before he settled in Baxter Springs in 1901. He was an honorary member of the Cherokee County Medical Society.

Dr. William Adam Wehe, 69 years of age, died at Stormont Hospital in Topeka on October 1, 1938. Dr. Wehe was born in Aurora, Indiana, in 1869, and attended Topeka High School and Washburn College and the University of Kansas before completing his medical education at the University of Michigan Medical School at Ann Arbor, from which he graduated in 1893. He was a member of the staff of Stormont and St. Francis Hospital and was a member and former president of the Shawnee County Medical Society.

### MEMBERS

Dr. R. F. Boone, formerly of Salina, has opened an office in White City.

Dr. W. R. Dillingham, Salina, and Dr. Lyle F. Schmaus, Iola, have been appointed as members on the Committee on Medical Economics and Committee on Border Line Groups, respectively.

Dr. R. G. Gomel, who formerly practiced in Abilene, has moved to Washington.

Dr. K. W. Haworth, formerly of Belle Plaine, has been appointed as physician in the Wichita schools.

Dr. D. O. Jackson, has opened an office in Clay Center. He previously practiced in Riley.

An article entitled "Duration of Smallpox Immunity" by Dr. David T. Loy and Dr. M. W. Husband, both of Manhattan, appeared in the August 27 issue of The Journal of the American Medical Association.

The September issue of the Digest of Treatment contains a digest of the original article "The Case History in Heart Disease" by Dr. Philip Morgan, Emporia, which appeared in the Journal in June, 1938.

Dr. Leon W. Zimmerman, formerly of Liberal, has opened an office in Hugoton.

Dr. F. C. Beelman, Wichita, and Dr. C. B. Stephens, Topeka, leave September 15 for Nashville, Tennessee, where they will enter Vanderbilt University for a three-months course in public health work.

Dr. F. L. Loveland, Topeka, underwent an emergency appendectomy on September 1. He has left Stormont Hospital and is recovering satisfactorily at home.

Dr. W. J. Eilerts, Wichita, was recently elected as national president of the Exchange Clubs, at a convention of that organization in Salt Lake City.

Dr. W. P. Stoltenberg, Kinsley, has been appointed county health officer for Kinsley County, by the county commissioners.

Dr. Clyde Wilson and Dr. Thomas P. Butcher, both of Emporia presented the scientific program of the meeting of the Lyon County Medical Society in Emporia on Sep-

tember 6. Dr. Wilson spoke on "Surgery in the Diabetic" and Dr. Butcher spoke on "Progress in Surgery in the Past Ten Years."

Dr. E. M. Seydell, Wichita, will assume the office of first Vice-President of the American Academy of Ophthalmology and Otolaryngology at the annual meeting of the Academy to be held in Washington, D. C., the week of October 9. Doctor Seydell, who has long been active in the affairs of the Academy, is also a member of the Council and the Committee on General Activities.

Dr. F. E. Dargatz, formerly of Kinsley has moved to Ardmore, Oklahoma, where he will be in charge of the Carter County Health Unit.

Dr. Russell Nevitt, formerly of Moran has gone to Dennison, Texas, to accept the position as resident physician in the M. K. & T. Railway Hospital.

Dr. W. R. Palmer a physician in Glasco for thirty years, has moved to Lawrence where he will continue his practice.

Dr. C. F. Taylor, Norton, was elected president of the Tuberculosis Committee at the meeting of the Rocky Mountain Conference recently held in Salt Lake City, Utah.

Dr. D. D. Vermillion has returned to Goodland following post graduate work. He will limit his practice to eye, ear, nose and throat.

---

## AUXILIARY

---

### PRESIDENT'S MESSAGE

Dear Auxiliary Members:

Vacations are over, the children are in school again, and at this time we are thinking ahead about our winter's work.

Our Auxiliary work should be very outstanding as we have the opportunity of helping our Health Education work in so many organizations. I know you are all just as anxious as I am to have this Health Education program in every organization:

"Health Education, The Keynote Of The Auxiliary Program."

Suggestions for State and County Chairmen of Program.

1. Make your programs interesting by using different methods of presenting subject matter: Dramatics, panel discussion, and open discussion. Lectures now and then. Condensations of magazines (Hygeias, Book Reviews).

2. Make your members feel that it is a privilege to attend.

3. See that each member has an opportunity to take part on the program in some way during the year.

4. Be enthusiastic and ready to give information concerning the Auxiliary Health Program.

5. All Committee Chairmen must have a chance to present their phase of Auxiliary work to the members—plan for this—cooperate in the whole Auxiliary Program.

6. Stress the point that we have our meetings for the purpose of knowing one another better and to

# B.P.M.

(Before Philip Morris)

Before Philip Morris, there was no radical difference in cigarettes. The new Philip Morris method of manufacture opens a new era—marks a major cigarette advancement.

*It has been reported\* that when smokers changed to Philip Morris, every case of irritation of the nose and throat due to smoking, cleared completely or definitely improved.*

Smoke Philip Morris. Suggest them for your patients. Verify for yourself the definite superiority of Philip Morris Cigarettes.

Tune in "JOHNNY PRESENTS" on the air Coast-to-Coast Tuesday evenings, NBC Network . . . Saturday evenings, CBS Network . . . Johnny presents "What's My Name" Friday Evenings—Mutual Network



**PHILIP MORRIS & CO.**

**PHILIP MORRIS & CO. LTD., INC.**

**110 FIFTH AVE., NEW YORK**

\*Please send me reprints of papers from

Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐

N. Y. State Jour. Med., 1935, 35-No. 11, 590 ☐

Laryngoscope, 1935, XLV, 149-154 ☐

Laryngoscope, 1937, XLVII, 58-60 ☐

**SIGNED:** \_\_\_\_\_ **M. D.**

(Please write name plainly)

**ADDRESS** \_\_\_\_\_

**CITY** \_\_\_\_\_ **STATE** \_\_\_\_\_

KAN.



learn the best way to carry out our Auxiliary objectives. The Program Chairman and her Committee should be the logical persons to bring this about and encourage this spirit of cooperation.

7. Discourage the spirit of competition. Make each person feel that her part on the Program is of vital interest and necessary for the production of the whole picture of Auxiliary endeavor and activity.

Our state election is due and as the other auxiliaries are working for the good of their societies, it is a very serious time in the medical profession that we should know who we are voting for. I want to suggest that every available voter, an Auxiliary member or not, vote. There are candidates up for election who would be a detriment or even a menace to the medical profession, and it behooves us to know who they are.

Your vote means much to the profession, so please vote.

Mrs. V. E. Holcombe will send us the national program very soon. As soon as you have a clipping please send it to Mrs. W. G. Emery, Barnard, Kansas, because that is the only way the counties can know what each of the other counties are doing.

Mrs. Frank E. Coffey.

The State Press-Publicity Chairman has not yet received the names of the County Press-Publicity Chairmen. Obviously, instructions and requests pertinent to this department cannot be sent to the proper addresses until such information is received. Perhaps this omission accounts for the non-receipt of news items from county auxiliaries. County chairmen should read in the "hand book" the rules governing the administration of their offices.

The president's letter, as published in this issue, is filled with constructive suggestions for Auxiliary work. It is our prayer that these suggestions be given emphasis in our programs and meetings. Medicine is entering its most critical period politically and is preparing for defense. Shall we do what we are expected to do in helping to mold public sentiment? Public opinion will be the factor which will determine the outcome of our battles with cults and in legislative halls.

Read our president's letter again, and then get busy.

Mrs. E. J. Nodurft represents both the Sedgwick County Auxiliary and the Parent-Teachers Association on the Wichita Soft-Water Committee. Mrs. J. G. Missilidine,

also of the Sedgwick County Auxiliary, represents the Junior League.

Mrs. L. E. Knapp, Wichita, reports that the Sedgwick County Auxiliary under the leadership of Mrs. M. O. Nyberg, past state president, is showing much enthusiasm and impatiently awaiting the first fall meeting. Members of this auxiliary are actively interested in many community projects.

Mrs. M. O. Nyberg, president of the Sedgwick County Auxiliary was hostess to the board members at their Innes Tea Room. Reports of committee chairmen were given and plans for the year discussed. The following new officers and committee chairmen were introduced. Mrs. J. S. Reifschneider, President-Elect; Mrs. E. E. Tippin, Vice President, and Program Chairman; Mrs. O. C. McCandless, Corresponding Secretary; Mrs. Frank Emery, Treasurer; Mrs. G. W. Kirby, Social Chairman; Mrs. N. C. Nash, Membership; Mrs. H. E. Friesen, Hygeia; Mrs. H. R. Hodson, Public Relations; Mrs. B. C. Beal, Nominating; Mrs. C. W. Wise, Historian; Mrs. E. J. Nodurft, Archives; Mrs. L. E. Knapp, Publicity.

#### CLASSIFIED ADVERTISEMENTS

Morphine and Other Drug Addictions—Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. 28 years' experience. Dr. Weirick's Sanitarium, 162 South State St., Elgin, Ill.

FOR SALE: Magnetic Plate Charger, also Westinghouse Stereoscope. Both in perfect condition. Address: X. F. Alexander, M. D., Box 607, Dodge City, Kansas.

#### THE STOKES HOSPITAL

LOUISVILLE, KY.

For the treatment of

Alcoholism, Drug Addictions, Mental and Nervous Diseases

Phone Highland 2101 or Write for Rates and Folder

E. W. Stokes, Medical Director

## Alcohol — Morphine — Barbital

Addictions Successfully Treated Since 1897 by the Methods of Dr. B. B. Ralph



Write for descriptive booklet

THE RALPH SANITARIUM

Ralph Emerson Duncan, M.D.

Director

529 Highland Ave.

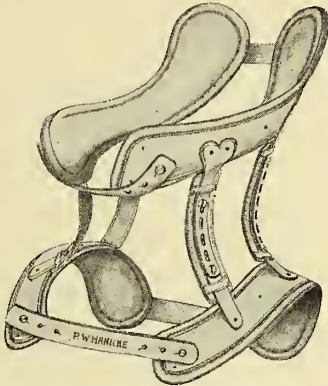
Kansas City, Mo.

Telephone—Victor 4850

Approved by the Council on Medical Education and Hospitals of the A.M.A.

## Apparatus for Fracture of Cervical Vertebrae

(Our Design)



**P. W. HANICKE MFG. CO.**

1013 McGee Street  
KANSAS CITY, MO.

Tel. Victor 4750



## CO-ORDINATION

When the success of a plan depends upon its perfect execution there must be strict co-ordination between the individuals involved.

No program of treatment can relieve the incidence of constipation unless the patient is willing to co-ordinate his efforts with those of the physician. That is why so many doctors prescribe Petrolagar for their patients. Its pleasant taste and gentle, consistent action are acceptable to the patient as well as to the physician.

Five types of Petrolagar provide a choice of medication to suit the individual case. Samples on request.

Petrolagar Laboratories, Inc. • Chicago, Ill.

## PROFESSIONAL PROTECTION

SINCE 1899  
SPECIALIZED  
SERVICE

### A DOCTOR SAYS:

"The only further proof that I can show of my appreciation is to continue my policy with your Company as long as I continue in practice, a policy that I have carried for fully twenty-five years."

THE

**MEDICAL PROTECTIVE COMPANY**

OF FORT WAYNE, INDIANA

WHEATON, ILLINOIS

*Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.*

**Petrolagar**





## SURGICAL FITTINGS

Graduate Fitters

Private Fitting Rooms

Your patients requiring SURGICAL SUPPORTS for Abdominal Ptosis conditions, Sacro-Iliac strains, Maternity, Post-Operative weakness, and different forms of Hernia, will be correctly fitted, when referred to

### A. M. Petro & Son

Surgical Fitters and Pharmacists

839 N. KANSAS AVE., TOPEKA, KANSAS

ELASTIC HOSIERY—TRUSSES—  
CURTIS PTOSIS SUPPORTS

## JOHNSON HOSPITAL CHANUTE, KANSAS

Complete Clinical

Laboratory

Radium

X-Ray

*Behind*

## MERCUROCHROME

(dibrom-oxymercuri-fluorescein-sodium)



*is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

Hynson, Westcott & Dunning, Inc.

BALTIMORE, MARYLAND

# THE Lattimore Laboratories

TOPEKA, KANSAS

J. L. Lattimore, M. D. Director

A. C. Keith, B. S. Chemist

Allen Gold, M.A., M.T.

H. C. Ebendorf, M. T.

**We invite consultation about the case that needs pathological service.**

**Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00**

*Containers furnished upon request.*

### OFFICES:

Topeka, Kansas

El Dorado, Kansas

Sedalia, Mo.

McAlester, Okla.

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

NOVEMBER, 1938

Number 11

## LUNG ABSCESS\*

Harold W. Palmer, M. D.

Wichita, Kansas

It is the purpose of this presentation to discuss non-tuberculosis pulmonary abscess, which may be defined as a focus of suppuration within the lung substance, accompanied by the destruction of lung tissue, going on to necrosis and liquefaction with the formation of a cavity. The order of presentation will be first, our present knowledge of the etiology, second the differential diagnosis, and lastly the therapy which includes the medical management and a short discussion of the various surgical indications.

Since the advent of routine use of chest x-ray in chest diagnosis, it has been noted that lung abscess is not a rare condition. By this means the diagnosis is made much earlier than before and therapeutic measures instituted at a much earlier date, all of which makes it far more likely that the patient will go on to complete cure without the complications formerly seen and many times without the need of surgical intervention. The method of production, or the cause of lung abscess, is the subject of considerable discussion. According to some observers the majority of cases result from the aspiration of infected material into the bronchial tree; others, however, hold that a septic embolus lodging in a branch of the pulmonary artery is a much more frequent cause of the condition. The experimental evidence for both view points is inconclusive, insofar as they have been able to prove their case. It has been shown by bronchoscopic examinations following tonsillectomy under general anesthesia that blood is aspirated into the bronchi in nearly three-fourths of all cases, yet the incidence of post tonsillectomy lung abscess is only 0.1 per cent or smaller. In experimental animals the introduction of infected material into the lung by aspiration is much more likely to insure the production of abscess if associated lung damage is already present, such as partial collapse

or inflammatory change. Also it has been shown experimentally that the normal lung is highly resistant to septic material containing a single organism, while immunity to abscess formation is markedly lessened if the infecting medium contains a mixture of organisms. From the foregoing it is apparent that simple aspiration is not enough, but that aspiration plus some other factor which will lower the normal resistance of the lung, is needed for the formation of abscess.

There are some very logical points to be shown in the consideration of the embolic theory. It is quite easy to understand how an infected embolus introduced into the pulmonary circulation and lodging in a terminal branch of the pulmonary artery in the lung can lead to the production of abscess, but is difficult to explain why abscesses following tonsillectomy and other operations are not multiple as occur so often in blood stream infections. More easily understood is the fact that lung abscesses are more frequent in abdominal operations in which the field is septic as in ruptured appendices. Certainly here the embolic and not the aspiration method would be the logical sequence. It should be remembered, however, that in these cases multiple abscess of the liver is common due to the drainage of the portal circulation and that the manner of production of lung abscess may be an indirect one, that is, from abscesses in the liver.

It is also possible that pulmonary suppuration may at times be produced by way of the lymphatics. The French are strong supporters of this point of view with respect to abscess following tonsillectomy but have no definite evidence to support their contention. It will be noted, however, that in subphrenic abscess extension by way of the lymphatics to the right lower lobe of the right lung is not uncommon.

When one considers all the experimental data at hand, together with the known clinical observations, it would appear that lung suppuration can result either by way of the aspiration or the embolic route; but the point that must appear in the foreground is, that unless some underlying pathological condition is present in the lung at the time of introduction of

\*Read before the Spring Clinical Assembly of the Sedgwick County Medical Society, April 6, 1937.



the infecting agent, the chances of the development of pulmonary abscess is remote; because the normal lung has a very high resistance to infecting organisms however introduced.

Among the pathological conditions, which commonly are known to give rise to lung abscess are:

A. Lesions of the respiratory tract.

1. Foreign body in the bronchus.
2. Infection of the lung, as pneumonia, both lobar and bronchial, and bronchiectasis.
3. Inflammatory reactions of the upper respiratory tract, as influenza and tracheitis.
4. Abscesses following tonsillectomy and dental extractions.
5. Fungus infections of the lung, as actinomycosis, monilia and leptothrix.
6. Bronchial carcinoma, acting similarly to foreign bodies in the bronchus.
7. Chest injuries.

B. Embolic abscess from operations in other parts of the body and from areas of sepsis as aural infections and osteomyelitis.

C. A primary group in which there is no known causative agent and which are not associated with disease in any other part of the body.

As might be suspected from this classification, a large number of infecting organisms are associated with pulmonary abscess, there being no single organism found in all cases. Both aerobes and anaerobes have been isolated from the sputum, but whether many of those found are causative or purely secondary invaders has not been definitely proven. In a given sputum as many as five distinct organisms have been found. Probably the most frequent is the streptococcus but some authorities report Vincent's organisms in as high as fifty to seventy-five per cent of the cases studied. Other organisms frequently found are the pneumococcus, staphylococcus, Friedlander's bacillus, colon bacillus, and influenza bacillus. Frequently diphtheroid organisms are thought to be associated in a symbiotic state with the streptococcus. Whether the organisms of Vincent's angina, the spirochete and the fusiform bacillus are a causative agent or a secondary invader has in the past been the subject of much debate, but they are now quite generally accepted as being definitely etiological. Rarer organisms found occasionally are those of the fungus and yeast group, and occasionally the ray fungus of actinomycosis. *Amoeba histolytica* has been reported.

The symptoms of abscess of the lung are not diagnostic early. The onset is usually acute with chill, rise in temperature, pain in the chest if there is pleural involvement, sweating and leucocytosis. But these same symptoms may be due to any one

of several pathological processes, such as lobular or lobar pneumonia, or a simple acute pleurisy. The symptoms may also be of more gradual onset with unproductive cough, moderate fever and slight elevation of the leucocyte count. Neither the physical signs nor the roentgenograms are diagnostic early but both show evidence of lung pathology. There may be no expectoration of fetid pus for as long as two weeks or longer, expectoration depending on whether or not the abscess has broken into and is draining into a bronchus. The diagnosis is one of elimination and a history of any of the causative agents mentioned is always looked for. After rupture into a bronchus the signs of cavitation are usually quite easily made out in roentgenograms, occasionally with definite fluid level but the physical signs of cavitation are usually absent due to the pneumonitis surrounding the cavity. If the cavity is near the pleura a thickened inflammatory pleura may mask the physical signs. To be considered in the differential diagnosis are bronchiectasis, encysted or interlobar empyema, pneumonia and pulmonary tuberculosis. Lipiodol examination is at times very helpful in differentiating a bronchiectasis. Even though the abscess communicates with the bronchus the area of inflammation about the communication prevents entry of the opaque fluid into the cavity of an abscess while it readily enters a bronchiectatic cavity. An encysted or interlobar empyema may be quite difficult to differentiate at times and a case in point will be shown later in this presentation. Needling of the chest in order to establish a diagnosis is open to serious objection in that by so doing the pleura may become infected and a putrid empyema result. Also cellulitis of the deeper layers of the chest wall may result which may prove fatal as in cases reported by Lilenthal. The absence of the tubercle bacillus on repeated examinations will of course rule out tuberculosis and usually there is little or no difficulty in differentiating the two roentgenologically. The sudden expectoration of large quantities of pus may be the first symptom in helping to differentiate the condition. The sputum may not at first be foul but usually becomes so in a few days. It may or may not be tinged or streaked with blood. The finding of the fusiform bacillus and the spirochete of Vincent should be considered as diagnostic of abscess. In young children and in adults past middle age a bronchoscopic examination should be done to rule out a foreign body in the former and a bronchial carcinoma in the latter in event the etiology is clouded and there is no pre-existing causative agent given in the history.

Abscess may occur in almost any location in any one of the five lobes, although especially in abscesses which are due to aspiration, the right lung

seems to be more commonly affected. The abscess may be near the base, near the hilus, or near the periphery or may be multiple in character and its location has a marked bearing on the prognosis and the type of therapy that is to be instituted.

Before any discussion of the therapy is undertaken it is believed that a clinical differentiation should be made between acute and chronic abscess of the lung. In the opinion of most, acute abscesses are best treated by conservative measures with the possible exception of those in which the necrotic area is shown to be rapidly enlarging under medical management, while chronic abscesses are probably all best treated by some form of surgery. An acute abscess may be defined as an area of necrosis without definite wall or fibrosed limitation and surrounded by a more or less extensive acute pneumonitis. When an abscess wall is formed and the surrounding pathological process assumes a stationary and dense appearance on the roentgenogram indicating the presence of considerable fibrosis and the patient's symptoms subside, the chronic stage may be said to have been reached.

It is estimated by various authorities that from forty to sixty per cent of all lung abscesses can be cured by conservative measures, that is, without the use of surgery and it is primarily this type of treatment that we would like to present in detail. In the past the failure of medical management has been largely due to faulty information in some instances and to improper application and lack of attention to detail in others.

As soon as an abscess is diagnosed, the patient should be put to bed as a sick patient, a free fluid intake should be insisted on and a high caloric and high vitamin diet given. In event the abscess has not ruptured into a bronchus, he should not be allowed to lose an undue amount of rest at night through failure to give sedatives. The use of codein or other drugs designed to abolish the cough reflex is ill advised in that coughing produces or tends to produce the very end that is hoped for, rupture and drainage of the abscess into a bronchus. In event such rupture does not take place in two or three weeks and the area of necrosis in the roentgenogram is getting larger, some surgical procedure is indicated. As soon as rupture does occur, as is usually the case, sputum smears and cultures should be made to determine the type of organisms present. In event Vincent's organisms are found neosalvarsan 0.3 grams should be given two or three times weekly. Some authors insist on its use even in the absence of these organisms, it having been noted that many cases negative at first show these organisms after three or four days drainage. In our opinion it should be given as it can do no harm even in their continued ab-

sence and serves as an excellent arsenical tonic. Postural drainage should be used as soon as the rupture occurs providing the general condition of the patient warrants and some go so far as to advise its use even before rupture with the hope that by changing the intrapulmonary pressure rupture may be brought about. This procedure would seem unwarranted. The only contraindication to the use of posture for drainage is the tendency to produce severe hemorrhage in some cases, and as has been already mentioned the extreme toxicity of the patient himself. The amount of time and frequency of the postural drainage can best be judged in individual cases by the amount of drainage at each sitting, the thickness of the sputum and the general condition of the patient. Postural tables are not necessary as the procedure can very well be carried out in any ordinary bed. The procedure is begun by placing the patient on the healthy side for from five to ten minutes to allow the abscess to drain into the larger bronchi which will produce better and more adequate drainage when the inversion of the patient is then attempted. When the abscess is in an upper lobe it is well to have the patient sit erect before taking the position of lying on the healthy side. The inversion of the patient is best accomplished by having him lie crosswise of the bed with the thighs at the edge bending at the waist so that the thorax is almost perpendicular and the face a distance of four or five inches above the floor. The patient supports himself by his hands and can be assisted by a nurse or other attendant. A pus basin is in place on the floor beneath the head for the collection of the sputum. The inverted position should be maintained for from three to five minutes but may be used longer if the drainage is slow and the patient's general condition warrants. The procedure should be done at least four times in twenty-four hours, preferably best one-half hour before each meal and at bed time. If the drainage is small it may be advisable to drain more frequently and for shorter intervals. It is not to be hoped that all purulent material will be emptied at each sitting but quantities will have been drained into the larger bronchi so that with the patient in the erect position they can be coughed up later. Narcotics in general are also contraindicated because of their tendency to lessen bronchial secretion thereby hindering drainage. When the sputum is viscid and difficulty in getting drainage is experienced, expectorant cough mixtures containing potassium iodide and ammonium chloride will be found of benefit. To combat the offensiveness of sputum, creosote is of value, although it is doubtful if it has any definite therapeutic effect on the abscess as formerly believed. The patient's mouth should be frequently cleansed with antiseptic mouth washes.



Potassium iodide therapy is also indicated in cases in which mycotic organisms are found. To be effective postural drainage must be persisted in even after there seems to be little or no drainage and after the x-ray examination shows the abscess cavity to be largely obliterated; this in order to prevent accumulation of secretion and a recurrence of the abscess. In event of foreign body the treatment is the removal of the foreign object by the bronchoscope followed by the postural drainage routine as outlined. The bronchoscope has been used and can be an aid to postural drainage in those cases in which mucus plugs or granulation tissue obstruct the bronchus and interferes with drainage. Artificial pneumothorax would seem to be indicated in central abscess near the hilus and has been used in such cases with some success but all agree it is contraindicated in abscess near the periphery because of the danger of rupture of the abscess into the pleural cavity with resultant putrid empyema which is almost universally fatal. Also peripheral abscesses are always associated with pleuritic adhesions which render collapse of the cavity by this method in most instances impossible. Vaccines either stock or autogenous are of no value in the acute cases and seem to be equally valueless in the chronic ones. Secondary anemias which are so commonly seen in these patients either as a result of hemorrhage or due to sepsis are best combated in the milder cases with iron therapy and in the more severe ones with blood transfusions. Roentgen irradiation may prove of value in clearing up pneumonic consolidation around the abscess, favoring liquefaction and early rupture of the abscess into a bronchus.

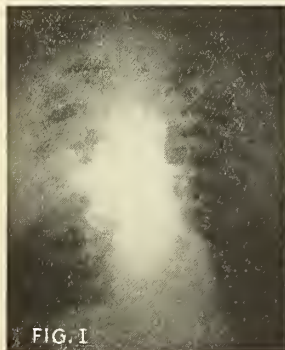
It is usually stated that before the medical management is abandoned it should have been used for from four to eight weeks depending largely on the progress or lack of progress in the individual case. It can be said, however, when there has been no tendency to collapse of the abscess cavity and the surrounding parenchyma has taken on a fibrous appearance in the reontgenogram at the end of an

eight-week period, that surgical interference is definitely indicated. The abscesses near the periphery are best treated surgically by the two stage method, while in deep abscesses confined to one lobe, lobectomy would come under consideration. When an abscess ruptures into the pleural cavity with the resultant empyema the treatment is surgical as in any other type of empyema, rib resection with drainage. In extensive multiple abscesses the prognosis is so poor it is questionable whether any type of surgical intervention is advisable.

### CASE REPORTS

First Case: J. E. T. white male, age thirty-five was first seen at home on April 14, 1933, suffering from influenza of two days duration. He had a temperature of 103 degrees F., a nonproductive cough and was acutely ill. On April 16, 1933, two days later, he coughed up a large amount of purulent foul smelling pus which contained the organisms of Vincent. The first x-ray plate (Fig. I) was made April 18, 1933, and showed a definite abscess near the hilus on the right side. He was given neo-arsphenamin 0.3 grams bi-weekly for one month and postural drainage. After three weeks time his cough was nonproductive and on May 22, 1933, about five weeks from the date of onset, the second plate (Fig. II) showed the abscess to be practically healed. He has remained well since that time.

Second Case: F. K. white male, age twenty-one, admitted to the hospital on March 5, 1936, acutely ill, with a temperature 104 degrees F., and all the signs and symptoms of a lobar pneumonia on the right base of about five days duration. (Fig. III) His sputum at this time was pneumonic in character and contained both the pneumococcus and streptococcus. Ten days after admission he developed signs of fluid in the right chest and was tapped and 300 cc. of a thin clear yellow fluid withdrawn. This fluid was negative to both smear and culture. Five days later he was tapped a second time and about three cc. of a similar fluid with the same bacteriological findings was withdrawn. At about this



time his sputum became large in amount, pustular in type and blood streaked at times. No Vincent's or fungi were reported in the sputum at this time. Postural drainage was given for about five weeks and he was discharged April 10, 1936, markedly improved with no cough or expectoration. His last film (Fig. IV) was made May 4, 1936. His subsequent course has been uneventful.

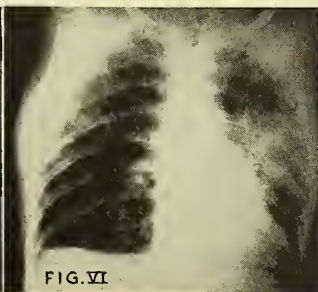
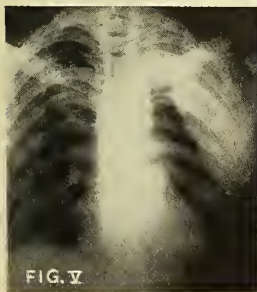
Third Case: J. S., age thirty-two, white male, admitted to the hospital January 9, 1936, complaining of weakness, pain in the left chest and unproductive cough following an influenzal history of about two weeks duration. His temperature ranged from 99.2 degrees to 102 degrees F. X-ray of chest (Fig. V) was taken shortly after admission and shows a circumscribed density in the left upper chest, which was thought to be an encapsulated empyema. This area was needled on three different occasions and no fluid obtained. On January 25, 1936, sixteen days after admission he coughed up about three drams of thick yellow pus. Smears and cultures from the sputum showed the pneumococcus and the absence of Vincent's organisms. Postural drainage was begun, which increased the amount of sputum and the patient's temperature rapidly assumed a normal level. Unfortunately this patient was allowed to go home without further x-ray studies having been made, but after four weeks at home the patient resumed work as a laborer and has remained well since. This case illustrates the difficulty in differentiating abscess from an encapsulated empyema.

Fourth Case: E. F., white female, age fifty. Admitted to the hospital January 8, 1936, with the history that in January, 1932, had broncho-pneumonia with very slow recovery. Some few months later she coughed up a large amount of foul sputum and an abscess was diagnosed. She had little or no medical care at this time. Her complaint on admission was that she had pain in the left chest radiating to the left arm with unproductive cough. She was a very highly nervous individual and we had every reason to believe that she exaggerated her pain. Figure VI shows the absence of bronchiectasis and extensive fibrosis of what is undoubtedly a healed

lung abscess in a lipiodol film. Postural drainage was tried on this patient and no sputum obtained. She ran no temperature at any time during her stay. A four plus Wassermann was found and the question of syphilis of the lung was raised, but this was thought unlikely. This case is presented to show that even without adequate medical care extensive abscess may go on to satisfactory termination.

Fifth Case: S. C., white male, age thirty-six, admitted to the hospital on March 16, 1935, with a history of cough, expectoration and shortness of breath of about two weeks duration. W. B. C. was 30,000 and patient was acutely ill, temperature 103 degrees F. and the sputum, the typical prune juice character seen in pneumonia. Because of his extreme illness x-ray films were made in bed with a portable machine. These plates are not shown because of their poor character but confirmed the diagnosis of a pneumonia. He was discharged at the end of two weeks, markedly improved with no temperature and with no expectoration. April 20, 1935, he was re-admitted to the hospital because of unproductive cough, fever and pain in the left lower chest. Figure VII shows AP view of abscess at base. Lateral film not shown proved abscess to be much larger than seen in AP view. Because of its location with the absence of rupture and the general debility of the patient operation was advised and he was operated by the two stage method with complete recovery.

Sixth Case: W. W., white emaciated male, age forty-three, was admitted to the hospital December 31, 1936, with a history that four months before he had had acute pleurisy in the right lower chest and had spat up about one-half tea cup full of bloody pus. Following this he had experienced little pain or expectoration until about ten days before admission when following an acute upper respiratory infection he again spat up large quantities of purulent material. He ran a temperature from 99 degrees F. to 100 degrees F. for the first three weeks of his admission. Postural drainage increased his sputum output but apparently had little or no effect upon the condition of the chest. The predominating or-





ganism of the sputum was the streptococcus and the sputum was negative for the acid fast bacillus, for Vincent's organisms and for fungi. During the fourth week of the patient's stay in the hospital he developed an acute lobar pneumonia in the left lung and died in about three days. Chest film (Fig. VIII) shows an extensive abscess in the right lower chest. Autopsy showed lephthorhix lung abscess on right and lobar pneumonia on left side.

### SUMMARY

In conclusion it may be stated that:

1. A very high per cent of acute pulmonary abscesses can be treated successfully by medical management alone.
2. The essential features of the medical therapy are postural drainage and in the presence of Vincent's organisms neo-arsphenamin intravenously.
3. This treatment is simple and can be successfully carried out in the patient's home in a large majority of cases if necessary.
4. The recognition of the limitations of medical treatment and the decision as to when surgery is advisable are important considerations in individual cases.
5. The differentiation between acute and chronic abscess is important in considering the type of therapy indicated.

### BIBLIOGRAPHY

- Bird, C. E.: Treatment of large pulmonary abscesses, *Journal of the American Medical Association*, October 17, 1936, volume 107, pp. 1288-92.
- Farrell, J. T.: Roentgenographic appearance of thorax after rib resection for pulmonary abscess, *Journal of the American Medical Association*, December 26, 1931, volume 97, pp. 1939-43.
- Lilienthal, H.: Operative treatment of abscess of the lung, *Surgery Gynecology and Obstetrics*, December, 1931, volume LIII, pp. 788-96.
- Marietta, S. U.: Treatment of acute pulmonary abscess, *Journal of the American Medical Association*, April 28, 1934, volume 102, pp. 1363-68.
- Neuhof, H., and Tauroff, Arthur S. W.: Acute putrid abscess of lung, *Surgery, Gynecology and Obstetrics*, September, 1936, volume 63, pp. 353-68.
- Goldman, I. B.: Bronchoscopic studies of abscess of the lung, *Archives of Otolaryngology*, April, 1936, volume 23, pp. 414-19.
- McLellan, P. G.: Leptothricosis, *Annals of Surgery*, March, 1936, volume 103, No. 3.
- Harrington, S. W.: Right pulmonary abscess, *Surgical Clinics North America*, August, 1932, 12:967-982.
- Lemon, W. S.; Porter, P. Vinson; Moersch, Herman J., and Wood, Harry G.: Clinic on abscess of lung, *Medical Clinics North America*, September, 1934.
- Lilienthal, H.: Rupture of lung abscess into clean pleura during operation, *Surgical Clinics North America*, April, 1935.
- Moersch, H. J.: Treatment of pulmonary abscess by bronchoscopy, *Annals of Surgery*, June, 1931.
- Cohen, J.: Bacteriology of abscess of lung and methods for its study, *Archives of Surgery*, February, 1932, volume 24, pp. 171-88.
- Cummings, G. O.: Treatment and management of nontuberculous pulmonary abscess, *Archives of Otolaryngology*, June, 1934, volume 19, pp. 684-98.
- Fisher, A. M., and Abernathy, T. J.: Putrid empyema, *Archives Internal Medicine*, October, 1934, volume 54, pp. 552-76.
- Miller, J. W.: Treatment of bronchial suppuration and pulmonary abscess by bronchoscopic drainage, *Archives of Otolaryngology*, March, 1933, volume 17, pp. 390-404.
- Tuttle, W. M., Cannon, Paul R.: Effects of local immunization on development of experimental abscesses of the lung, *Archives of Surgery*, February, 1935, volume 30, pp. 243-65.
- Yates, J. L.: Pulmonary abscess, *Archives of Surgery*, August, 1932, volume 25, pp. 257-72.
- Neuhof, H., and Hirschfeld, Samuel: Putrid empyema, *Annals of Surgery*, December, 1934.
- Smith, D. T.: Diagnosis and treatment of pulmonary abscess in children, *Journal of the American Medical Association*, September 29, 1934, volume 103, pp. 971-74.
- Sweany, H. C.; Stadinchenko, A., and Henrichsen, K.: Multiple pulmonary abscess simulating T. B., *Archives Internal Medicine*, April, 1931, volume 47, pp. 565-82.
- Fantus, B.: Therapy of nontuberculous lung abscess, *Journal of the American Medical Association*, May 16, 1932, volume 106, No. 20.
- Bohrer, John V.: Lung abscess, *American Journal of Surgery*, October, 1936, volume XXXIV, No. 1.
- Maxwell, James: Lung Abscess, *Lancet*, August 22, 1936.

## THE ELECTROCARDIOGRAPH

### ITS VALUE AND INDICATIONS

Fred J. McEwen, M. D.

Wichita, Kansas

#### I

### INTRODUCTION

In 1903 William Einthoven<sup>7</sup>, the Dutch physiologist, introduced the first practical electrocardiograph and immediately opened the way for accurate graphic recording and study of the heart beat. Sir Thomas Lewis<sup>1,2</sup> and his group of English workers quickly and eagerly began to use the instrument and soon Lewis published his fine works on the "Mechanism of the Heart Beat" and on "The Arrhythmias." Perhaps for the study of the arrhythmias alone there might have been a satisfactory place in medicine for the electrocardiograph and in the earlier years its usage did spread slowly. However, in 1920<sup>3</sup> Pardee called attention to definite changes in the ventricular portion of the cardiogram in obstruction of the coronary arteries and its use spread more rapidly. In 1932<sup>4</sup> Wolforth and Wood demonstrated the value of direct chest leads for the diagnosis and localization of coronary occlusion, and with the addition of the fourth or chest lead to the three standard leads it is now possible to demonstrate myocardial damage and coronary pathology, which formerly was often impossible. The studies and research in electrocardiography carefully checked with clinical, laboratory, and post mortem findings continue, and most students feel that there are still many possibilities for new discoveries and that the subject is not a closed one.

With the rapid development in use and value of the electrocardiograph many physicians have been unable to keep up and finding an electrocardiograph easily available in almost every community ask themselves, just what is its value and when should one use it, and afterward what does one expect when a cardiogram has been made?

Some physicians place too much confidence in the interpretation of the cardiogram and may be led astray. Some physicians have a tendency to shun the

electrocardiogram as some new and questionable affair that should not be accepted in good medical practice. Perhaps there is a greater third group that after careful history and physical examination make use of the cardiograph much as they do other laboratory tests and the x-ray, realizing that the diagnosis and treatment of heart disease is still primarily clinical and that all confirmatory laboratory assistance must fit in with clinical findings.

It will be the purpose of this paper to consider the value and uses of the electrocardiograph, first as an aid in diagnosis of cardiac disease; second, as an aid in treatment; and third, as an aid in prognosis.

## II

### THE ELECTROCARDIOGRAM IN DIAGNOSIS

The diagnosis of heart disease is usually possible clinically but even with careful clinical work many uncertainties arise. The patient with the irregular heart is often difficult. Frequent premature beats often may be confused with auricular fibrillation. The former may be present without serious heart disease while the wholly irregular rhythm of auricular fibrillation usually means a more serious condition and an entirely different outlook for the patient and different treatment by the physician.

In older patients auricular fibrillation often occurs with degenerative heart disease with rather slow ventricular rate and it is impossible to differentiate it from partial heart block. Occasionally in younger persons a type of heart block occurs with occasional dropped beats that simulates an occasional extra systole. The cardiogram here reveals definite myocardial damage even when there has been no definite suggestive history and the heart is not enlarged. The presence of such a heart block does mean watchful care and prohibition of strenuous physical activities.

Auricular flutter is not common and is usually characterized by a persistent rapid and regular heart. The ventricular rate with flutter may be around eighty per minute with three auricular beats to one ventricular beat or at 160 with a two to one block. There are practically always findings of severe heart damage. Recently a patient came to the office with auricular flutter with irregular responses of the ventricle. At first the rate was about 140 per minute and regular and later while resting the heart rate was about 120 and wholly irregular, simulating an auricular fibrillation. A satisfactory diagnosis here required a cardiogram.

Paroxysmal auricular tachycardia sometimes lasts many hours or even several weeks. When it persists it closely resembles auricular flutter. The treatment and prognosis of paroxysmal auricular tachycardia, which consists of a series of premature beats occurring regularly at around 160 per minute, are en-

tirely different from that of flutter. The cardiogram is necessary for diagnosis and for treatment if there is any doubt.

Occasionally one encounters a bradycardia with irregular rhythm and the electrocardiogram reveals occasional failure of impulse formation. This rather rare condition of sino-auricular block is often present in degenerative heart disease and may be accompanied by syncope or epileptiform seizures. Whether the rhythm is regular or irregular it is wise to have a cardiogram for diagnosis in all hearts with rates of 50 per minute or less.

Whenever heart disease is suspected or feared either by the patient or the physician there is reason enough to try and be sure of the diagnosis by every available means. In recent years there has developed considerable fear of heart disease, and for the heart-conscious cardiac neurosis there is real help when in addition to a careful study the physician is able to present a normal electrocardiogram. Some patients will present symptoms of dyspnea and tachycardia on exertion without history or signs of myocardial failure. Other patients may present findings of hypertension which may be transient; other patients may describe attacks of substernal pain which are not typical, and with this group of suspicious cases the electrocardiogram usually has the answer. Evidence of delay in conduction time—bundle branch block—and other evidence of damage as seen in the tracing enable the physician to properly guide the patient and offer sound advice on management.

The diagnosis of coronary occlusion and its degree of severity is usually a purely clinical matter. However, there are a number of conditions which may resemble coronary occlusion. Gall bladder colic, herpes zoster on left side, intercostal neuritis, and pleurisy may be very confusing and occasionally a perforated gastric ulcer may give a few anxious hours. The cardiogram is then essential in establishing the diagnosis and location of the occlusion.

## III

### IN TREATMENT

The changes in the electrocardiogram produced by coronary occlusion change from time to time and in conjunction with treatment repeated cardiograms enable the physician to observe the improvements in tracing and the extent of recovery. Digitalis produces many changes, including premature beats, heart block, and even fibrillation. In treating auricular fibrillation enough premature beats may be produced to hide the fundamental rhythm. An electrocardiogram on a patient under digitalis therapy is valuable in indicating over-digitalization often before clinical symptoms develop. It is also valuable in treatment of auricular flutter to be sure the flutter



has been relieved and that a three to one or four to one block has not been produced.

After acute infectious diseases such as pneumonia and scarlet fever or rheumatic fever the cardiogram serves as a guide in convalescence and return of the patient to normal activity.

#### IV

The electrocardiogram is of definite value in making prognosis more accurate. Life insurance companies when writing a large contract require a normal cardiogram in conjunction with other normal clinical and laboratory findings before awarding the insurance. In many cases of suspected heart disease where clinical findings are not sufficient the cardiogram is very valuable in prognosis and guidance to the patient. In cases of suspected angina pectoris where an abnormal cardiogram is found it constitutes strong evidence for coronary disease. In cases of hypertension without cardiac symptoms the cardiogram enables the physician to more accurately forecast the expected chances of the heart. Among older patients facing surgery or other unusual strain there is need for additional evidence sometimes not evident with examination.

#### V

#### SUMMARY

The electrocardiograph has taken its place in the practice of medicine along with the x-ray and other laboratory aids. It should be used just as a laboratory aid and does not cancel the value of careful history and physical examination and clinical judgment.

It is of definite value in diagnosis, treatment, and prognosis among patients who have or are suspected of having heart disease.

#### BIBLIOGRAPHY

1. Lewis, Thomas: Mechanism and Graphic Registration of the Heart Beat. New York; Hoeber, 1920.
2. Lewis, Thomas: Clinical Electrocardiography. London, Shaw & Sons, 1913.
3. Pardee, H. E. B.: An Electrocardiographic Sign of Coronary Artery Obstruction. Archives Internal Medicine 26:244, August 1920.
4. Wolforth, C. C. and Wood, F. C.: American Journal Medical Society 183:30-1932; 2nd, Experimental Coronary Occlusion, Archives Internal Medicine 51:771 (May) 1933.
5. Carter, J. B.: The Clinical Value of Electro-Cardiography. Illinois Medical Journal, February 1935.
6. Behneman, H. M. F.: Electrocardiography: Its Value to the General Practitioner, California & Western Medicine, August 1936—Vol. 45, No. 2.
7. Einthoven, W.: Archives international de physiologie 4:132, 1906.

Poisonous Eyelash Dye—The United States Department of Agriculture in recent weeks has seized consignments of "Lash Lure" and "Magic-Di-Strick Lash and Brow Dye," products of the Cosmetic Manufacturing Company and Dependable Concentrated Cosmetics, Inc., respectively. Both firms are located in Los Angeles. The government charged that these products are adulterated in that they contain a poisonous coal tar preparation which may cause serious eye injury or even blindness to users.—Better Business Bulletin, September 22, 1938.

## GUNSHOT WOUND OF THE HEAD

Cyril V. Black, M.D.

Pratt, Kansas

I would like to present a case of gun shot wound of the head, which must have involved considerable brain damage without serious after effects.

B. B., age twenty-six, was admitted to emergency room December, 1935, saying: "I have been shot." History: While getting in his car to return home from a hunting trip, the patient dropped his rifle, the butt stopping on the running board of the car. This caused the gun to be discharged, the bullet striking the patient somewhere in the face. The gun was a 22 caliber rifle loaded with a long high power shell, hollow point bullet. He was stunned for a few seconds only. About an hour and a half



X-ray showing fragments of bullet in brain

had elapsed between the time of the accident and his entering the emergency room.

The patient walked into the emergency room and got upon the operating table. His face was covered with blood and his mouth was full of blood. Upon cleaning this away there was no evidence of a wound. Further examination revealed that the bullet had gone up the right nostril through the right frontal sinus and had not broken the skin at any point. He received the usual 1500 u. of tetanus antitoxin.

From the picture it is evident that his nose was very close to the muzzle of the gun. The patient was not in shock as the pulse and blood pressure were normal. He complained only of a pain in his head, neck and shoulders, and was not bothered by his

nose injury. An x-ray picture showed the fragments of the bullet in his brain, the one large fragment under the sensory area of the brain on the right side, high up in the arm and shoulder area. The second day hyperesthesia and hyperalgesia developed, bilateral extending from the level of the fifth rib upward to the top of the head. The patient maintained a sitting posture in bed holding his back and neck rigid, turning his body on his lower spine to look about. He would not move his arms, the touch of cloth to any of this region was painful, both light and heavy touch were accompanied by severe pain. This began to lessen in about two weeks but has persisted to some extent ever since. His temperature and pulse never varied from the normal. There was never any evidence of infection.

Although there was no complete paralysis of any muscle or group of muscles, ability to use his hands or arms skillfully was greatly impaired for several months and persists somewhat to the present time. There was also considerable weakness of the hands and arms. This condition was also bilateral. However the patient is now able to earn a living by ordinary labor.

## SURGERY IN THE DIABETIC\*

Clyde Wilson, M.D.

Emporia, Kansas

Diabetes mellitus has been known since the dawn of the Christian era. Willis, in the latter part of the Seventeenth Century, thought that the sweet taste of the urine was probably due to sugar, and Dobson, in 1775, actually obtained it.

It is well within the memory of many of us here that surgical interference in the diabetic meant, in the majority of instances, the hastening of dissolution. At that time diabetics were looked upon as bad surgical risks, operations were done only for emergencies, always with fear and too frequently ended in death as the result of coma and acidosis.

Today, with the help of insulin and our modern conception concerning perverted metabolism and the means of its correction, not only emergency surgery but that looking toward prophylaxis and repair is done with a reasonable probability of success. As a result of our modern methods more diabetics are reaching adult life; and being subject to the surgical conditions of the respective age levels, they show an increased percentage in our surgical practice.

In well organized hospitals or groups where there

is close cooperation between the medical and surgical sections the mortality rate from operations on diabetics compares very favorably with that for similar lesions in corresponding age levels on non-diabetics, with such results possible this is truly the more abundant life and a distinct triumph for modern medicine, made possible by an unhampered medical profession exercising meticulous care in performing the various details of treatment and the exercise of medical and surgical judgment. While preparing diabetics for surgical interference certain factors combine to make them potentially poor surgical risks, these are an increased susceptibility to shock, intolerance to trauma, presence of cardio-renal lesions, lessened recuperative and reparative powers, the constant threat of depletion and dehydration from the effects of starvation, diarrhea, and vomiting and the further disturbing effects upon metabolism exerted by fever and infection. In estimating the surgical risk of a patient with diabetes these problems must be born in mind in addition to the immediate surgical condition presented; and further consideration to first, complications; second, hazards peculiar to the abnormal metabolism of diabetics; third, the effects of insulin; and fourth, pathology incident to conditions requiring surgical interference. In general it is true that the higher the blood sugar, the graver the prognosis; although the extent of hyperglycemia is not always an absolute index of the severity of the disease. Routine urine examinations are usually relied upon to exclude diabetes before operations and, while glycosuria is usually present in hyperglycemia, exceptions are not infrequently noted in surgical cases. The correlation between the amount of sugar in the urine and blood is certainly not a close one. Hypoglycemia may be noted in emaciated and debilitated patients and needs correction before any sort of surgical interference is instituted.

Acidosis increases greatly the risk to surgical patients yet emergency operations can and must be done in the presence of it. In those in which the time element is not urgent relief from ketonuria before any major surgical procedure is advisable.

The hazards peculiar to the abnormal metabolism of the diabetic are to be found in the increased metabolism of those suffering from hyperthyroidism, infection and overfeeding and in the decreased metabolism of exhaustion from under-nourishment. It is quite obvious the more rapid and more recent the exhaustion the more serious the condition the patient presents. The use of insulin plays an important part in estimating the danger of surgery to the patient. The usual cause of death of surgical diabetics before the advent of insulin was acidosis and coma. Today this is rarely seen, the cause of death being directly attributable to the surgical lesion.

\*Presented before the Lyon County Medical Society in Emporia on September 6, 1938.



Insulin, I am quite sure, prevents or cures acidosis and enables the patient to take a fuller diet promoting increased resistance and hastening recovery.

The pathology associated with diabetics that is important from a surgical standpoint is to be found in the vascular system of the extremities, particularly the legs. The vast majority of diabetics coming to surgery are above forty years of age, with a high percentage of these between the ages of fifty and sixty; at which period of life arteriosclerosis is a common finding. In the non-diabetic the changes in the arterial wall of the extremities are found in the middle coat. These consist of calcification with thickening of the intima and the deposit of atheromatous material. In addition to this typical arteriosclerosis, Warren and Smith have described another type of arterial lesion in the diabetic consisting of endothelial proliferation and fatty deposits in the intima. This type may develop rapidly or be present for a long time before the member becomes gangrenous.

In the slowly developing cases of both types the best developed collateral circulation is found, while in some cases of short duration, advanced changes in the intima with little or no collateral circulation obtained.

Diabetic gangrene is rare in the young patient and is most frequently seen after fifty, when it frequently is associated with an increased incidence of general arteriosclerosis. The effect of chronic hyperglycemia and the disturbance in metabolism of fats, particularly the results of long continued hypercholesterolemia are believed by many to be the factors promoting calcification and obliteration of the lumina of vessels. The preparation of the diabetic patient for surgery will vary with the presence or absence of infection in the lesion marked for surgical interference. In the absence of infection time is not a factor. It is quite obvious, then, that surgery can be deferred until such time as the objectives of preparational treatment are attained. These are, first, freedom from acidosis and glycosuria and a diet providing at least fifteen calories per pound of body weight with or without insulin, and, second, the attainment of the most advantageous state for operation relative to the nutrition of the patient and protection against infection. In these elective cases permitting such preparation the results are quite satisfactory and the case is allowed to pursue its ordinary surgical course. The practice of starving patients preceding operations has been largely discontinued and it certainly has no place in the preparation of diabetic patients. Adequate reserves of glycogen, fluids, and salt are essential and can only be maintained through proper nutrition. Feedings, then, should be continued until a few hours before

time set for operation. In those cases in which insulin has been used in the patient's preparation it should be discontinued when the food has been withdrawn, avoiding hypoglycemia, and shock.

In the presence of surgical emergencies nothing is to be gained by delay, even in the presence of infection. Delay may be harmful. Infection tends to increase the sugar content of the blood precipitating acidosis and coma. It limits the efficiency of insulin. It is therefore, quite obvious that it should, if possible, be eliminated without delay.

For this it is perhaps best to administer thirty or forty units of insulin subcutaneously and 1000 cc of salt solution intravenously and proceed with the operative interference after which further treatment based upon blood and urinary findings is carried out. The operation should be done as rapidly as is consistent with safety and thoroughness, securing complete hemostasis and minimizing trauma. It is rarely, if ever, necessary to administer insulin during any surgical procedure. The dehydration incident to the acute illness should be combated by the administration of fluids, preferably salt or Ringers solution, which may be started during operation. The choice of administering it subcutaneously or intravenously will depend upon one's judgment, particularly with reference to the patient's cardio-vascular system since it is not advisable to place undue strain on a weakened or damaged myocardium. While subcutaneous and intravenous administration of glucose solution are frequently necessary oral feeding should be instituted as soon as the patient's condition allows. Glucose given parenterally, escapes the glycogen barrier of the liver and is in part excreted in the urine rendering urinary analysis useless as an index of the patient's progress.

Anesthetics are important. Chloroform and ether produce some degree of hyperglycemia and acidosis in normal individuals, and effects are intensified by post operative vomiting and food restriction. Infiltration anesthesia is ideal when the lesion is accessible to this method. Spinal anesthesia is quite satisfactory when the lesion involves the pelvis or extremities. Some have a preference for this for all abdominal lesions while other feel that the increased dosage required for upper abdominal work makes it less satisfactory than inhalation anesthesia. Nitrous oxide or ethylene produce but little change in blood sugar and as a rule, little or no nausea allowing the patient to take and retain food early. If abdominal relaxation is necessary to the shortening of the time for operation or to reduce the amount of trauma incident to manipulation, the addition of a little ether to the nitrous oxide will accomplish this end.

The preliminary and after care of the surgical diabetic should be entrusted to one thoroughly con-

versant with the metabolism of diabetes. The perplexing problem of the surgical diabetic should rest upon the internist and surgeon, each qualified in his field. The frequency with which gall bladder disease is associated with diabetes has inspired many to feel that more than a casual relationship exists between the two, the disease in the pancreas being secondary to that in the gall bladder. The most frequent age for the onset of diabetes is fifty years and well within the common age incidence of gall stone; while the longer duration of diabetes under the present methods of treatment allows greater opportunity for the development of gall bladder disease as well as increased occasion for its recognition. Regardless of this observation the improvement which sometimes comes following the removal of diseased gall bladders, whether due to the clearing up of foci of infection or not, seems to have a beneficial effect upon this metabolic disorder and would justify surgical interference, both as a prophylactic and curative measure. The relationship of hyperthyroidism to diabetics presents points of interest and difficulty. That the assimilation of glucose is disturbed in hyperthyroidism is shown by the glucose tolerance test and by the frequency with which glycosuria is noted both in primary hyperthyroidism and in adenomata with secondary hyperthyroidism. It is very difficult at times to say whether the disturbed metabolism represents a true diabetes. Joslin and Lahey offer a different standard for diagnosis of true diabetes in the presence of an overactive thyroid in requiring a higher blood sugar than for the usual diabetic.

One is beset with difficulty in his attempted control of this increased metabolism due, no doubt, to an increase in thyroxin. It increases the danger of acidosis and renders insulin less effective, a condition analogous to that seen in infection. On a low carbohydrate diet there is an increase in the amount of acetone bodies in the blood. On a high carbohydrate diet one might not be able to keep the urine sugar free but it is possible to prevent the appearance of acetone bodies. Insulin, diet, and iodine may be employed together to carry such patients successfully through a sub-total thyroidectomy after which they readily respond to the usual treatment for diabetics.

The group of diabetics showing the greatest mortality is the one in which complications intervene, such as infection, cellulitis, carbuncles and gangrene. The practice of giving diabetic patients printed instructions pertaining to the hygienic care of their bodies is to be commended. Scrupulous body cleanliness is to be attained by daily baths with soap, avoiding vigorous scrubbing. When the skin is quite dry olive oil or lanolin should be prescribed. Light

woolen socks or stockings which are neither too short or too long should be worn with well fitted shoes. Extremes of temperature should be avoided. The care of blisters, corns, bunions, skin abrasions, and infection about the feet, should receive our earnest consideration. In the presence of coldness, numbness, and pain in the feet or legs the parts should be thoroughly searched for circulatory disturbance, particularly if the patient is fifty years of age or more. The x-ray is of great value in revealing calcification in the larger arteries but does not show the capillaries upon which collateral circulation depends. Unfortunately I know of no laboratory test which gives an accurate estimate of the efficiency of collateral circulation. This, however, can be fairly evaluated by noting the color, temperature and the reaction to changing positions of the affected member. Arterial pulsation may be absent in a foot where collateral circulation is adequate. However, such a foot lives under a constant threat of disaster. It might be advisable to attempt by mechanical means to try to stimulate the development of collateral circulation before the advent of complications, as have been described by Buerger.

Gangrene complicating diabetes occurs clinically in three groups: One in which the condition is due primarily to deficient circulation; one in which the condition is primarily due to infection; and one in which infection is superimposed upon a deficient circulation. Three types of gangrene are to be seen—the arteriosclerotic, the embolic and the third, for the want of a better name or description, is called diabetic gangrene. The arteriosclerotic is similar to the senile type as seen in non-diabetics. The embolic of thrombotic results from an embolus or an occluding thrombus due to an acute infection usually. In the so-called diabetic gangrene arterial occlusion has occurred slowly and extensively. Adequate collateral circulation has developed; a minor wound, has provided the portal of entry for infection. It is in this group that septicemia frequently develops with its resultant high mortality. Aside from diabetes producing arteriosclerosis it prepares the soil for gangrene by its influence on the nutrition and metabolism of the tissue, the actual precipitant being oftentimes a very slight injury.

The treatment of diabetic gangrene depends upon its extent, amount of pain, collateral circulation, blood pressure in the part and amount of infection. Incision and drainage is rarely indicated alone but may be combined with amputation of a toe in case the collateral circulation is sufficient to localize the infection to the member. Amputation of gangrenous toes may be undertaken first when there is good pulsation in the dorsalis pedis artery; second, when the gangrene is fairly well demarcated in the



absence of pulsation in the dorsalis pedis artery providing the foot is warm and of good color, especially when dependent; third, when the diabetes is mild, the pain in the foot negligible and the gangrene and infection remains localized.

Major amputations are indicated in cases presenting first, definite gangrene of one or more toes in absence of dorsalis pedis pulse provided the foot or a part of the foot is cold and of poor color or provided there is a definite point of temperature change in the lower leg; second, beginning gangrene with spreading infection involving the deeper structures of the foot; third, deficient blood supply without actual gangrene in which pain is not relieved by usual measures; fourth, a live foot so far as circulation is concerned but in which prolonged sepsis endangers life because of diabetes.

Carbuncles in non-diabetics usually present as localized areas of infection. When death ensues it is due to septicemia, metastatic abscesses and exhaustion. Localization of infection depends upon the vitality and resistance of the patient. The relation between diabetes and infection is such that the protective qualities are deficient in the diabetic; with the result that localization is absent or notoriously imperfect. Early and efficient treatment are imperative; first, efficient treatment of diabetes; second, proper use of heat to localize infection; third, operative interference properly done. Surgery is indicated as soon as the central portion shows softening. This should consist of a crucial incision extending to the margin of the infiltrated area. The tissue showing purulent infiltration is exercised, the cavity charred with the actual cautery. The wound is then packed with vaseline gauze. Should healing be slow and no evidence of infection remain, pinch skin grafting may be used.

I do not believe vaccines, auto-hemic therapy or x-ray offers the diabetic as much as the above, for the relief of similar conditions. However it is not enough to say that surgery is safe for the diabetic. We must make our diabetics safe for surgery.

---

**Fake Agent Duping Doctors**—Complaint has been received against a man claiming to represent Simmons and Co., 814 Oak street, Kansas City. He has been approaching doctors in the Middle West to repair medical instruments, collects part payment in advance, takes the instruments, and is not heard from again.

This company cannot be located and the address given is that of a parking station. The agent is described about 50 years old, 5 feet 7 inches tall, slender, smooth shaven, and wears glasses. He has a Shriner emblem and emphasizes his alleged membership in the lodge.—Better Business Bulletin, September 29, 1938.

## APPENDICEAL ABSCESS LOCALIZED AT UMBILICUS\*

Maurice A. Walker, M. D.,  
and

Glenn R. Peters, M. D.

Kansas City, Kansas

A white boy, aged eleven, had cramps over his entire abdomen on August 4, 1937. On the following day he vomited several times, and tenderness became localized in the right lower quadrant. His mother treated him at home for twelve days, administering various laxatives.



Figure 1

When first examined by us on August 16 after admission to St. Margaret's Hospital, there was a firm tender mass extending from the symphysis pubis to above the umbilicus. His temperature was 104.0 degrees F. His tongue was dry and he was obviously dehydrated. The leukocyte count was 19,800, with eighty per polymorphonuclears.

Hot moist packs were applied to his abdomen, and saline solution was given subcutaneously. His fever gradually diminished. By August 22, the mass had become soft. His umbilicus was fluctuant and everted (figure 1). Using local anesthesia, an incision three cm. long was made through the skin of the umbilicus, giving exit to about 400 c. c. of pus

\*From the Department of Surgery, University of Kansas School of Medicine.

with a fecal odor. Drainage persisted for ten days. He left the hospital on September 2, 1937.

When examined on August 28, 1938, he was entirely well and stated that he had been so since leaving the hospital one year previously.

## A PRELIMINARY REPORT ON THE USE OF CEVITAMIC ACID IN THE TREATMENT OF WHOOPING COUGH

E. L. Vermillion, M.D., and George E. Stafford, M.D.

Salina, Kansas

The treatment of whooping cough has been a major problem particularly to those interested in the illnesses of children and to the general practitioner for at least the past four centuries. The disease is at times difficult to diagnose and usually difficult to treat. Many of the recommended procedures seem to be effective in a few cases, but few if any give constant results in all cases. One who has tried the various forms of treatment recommended is still searching for an effective agent.

Otani<sup>1</sup> in 1936 treated eighty-one cases of whooping cough with large amounts of vitamin C intravenously and found that thirty-four were greatly benefitted, thirty-two moderately benefitted, and fifteen unaffected.

Ormerod and Unkauf<sup>2</sup> of Winnepeg, working without knowledge of Otani's findings, reported ten cases treated with ascorbic acid given orally; confirming the work of Otani and concluding that ascorbic acid definitely shortened the paroxysmal stage of the disease if large amounts were used early in the course of the disease. In a later report by Ormerod, Unkauf and White,<sup>3</sup> nineteen additional cases were reported with similar findings.

These papers stimulated us to use cevitic acid in our own cases. We are reporting the following twenty-six cases, all of which had a definite clinical picture confirmed in most cases by a high leucocytosis and lymphocytosis.

The first sixteen cases were given fifteen mg. tablets of cevitic acid, ten tablets daily the first three days, eight tablets daily the next three days, and six daily until symptoms entirely subsided.\*

This medication is palatable, dissolves readily, can be given in food or drinks, is non toxic and has no objectionable features.

Case No. 1. Baby B. Age four months, coughing ten days. Definite exposure. Symptoms free after ten days of treatment.

Case No. 2. Baby F. Age six weeks. W B C 22,500.

Lymphocytes fifty-two per cent. Coughing two weeks, whooping and vomiting. Symptoms subsided rapidly, disappearing in ten days.

Case No. 3. M. I. Age three years. Coughing three weeks. W B C 10,950. Lymphocytes fifty-six per cent. Whooping and vomiting disappeared within seven days.

Case No. 4. M. 11. Age five years. Coughing two weeks. W B C 16,000. Lymphocytes fifty-two per cent. Whooping and vomiting subsided gradually disappearing in two weeks.

Case No. 5. D. K. Age four years. Coughing, whooping and vomiting for four weeks. W B C 12,000. Lymphocytes thirty-eight per cent. Symptoms subsided gradually for three weeks. The cevitic acid not being considered very effective in this case.

Case No. 6. J. E. Age six years. Coughing for two weeks. Occasional whooping and vomiting. W B C 14,650. Lymphocytes sixty-six per cent. Complete disappearance of symptoms in seven days.

Case No. 7. F. E. Age four years. Coughing, whooping and vomiting for fourteen days. W B C 21,300. Lymphocytes forty-five per cent. Symptoms disappeared in ten days.

Case No. 8. J. E. Age two years. Coughing, vomiting and whooping for ten days. W B C 28,350. Lymphocytes sixty-two per cent. Symptoms subsided gradually during fourteen days.

Case No. 9. E. J. Age six years. Cough, no whooping or vomiting but with definite exposure. W B C 9,600. Lymphocytes sixty-two per cent. Cough disappeared in six days.

Cases No. 10. B. O. Age eight years. Coughing and vomiting eight days. W B C 17,200. Lymphocytes sixty per cent. Cough subsided in two weeks.\*

Case No. 11. M. W. Age two years. Coughing, whooping and vomiting ten days. W B C 7,700. Lymphocytes sixty per cent. Symptoms subsided abruptly on the fourth day.

Case No. 12. Baby S. Age two and one-half years. Coughing ten days. Definite exposure. W B C 9,500. Lymphocytes forty-three per cent. Cough subsided abruptly on the sixth day.\*

Case No. 13. H. H. Age two years. W B C 24,000. Lymphocytes forty-eight per cent. Severe whooping cough for seven weeks. Symptoms disappeared completely on the fifth day.

Case No. 14. J. C. Age seven years. Coughing, whooping and vomiting for two weeks. W B C 19,950. Lymphocytes forty-four per cent. Symptoms subsided gradually for ten days.

Case No. 15. Baby S. Age ten months. Coughing, whooping and vomiting for two weeks. Definite exposure. Symptom free at the end of four days.

\*These cases had previously had Sauer's whooping cough Vaccine.



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

In an article recently written and published by William Allen Pusey, M.D., former President of the American Medical Association, the following quotation is worthy of consideration:

"The best possible thing for the medical profession and for the public health is that medicine should continue to have its present attractions. It is of the highest importance for the continued welfare of the public and the efficiency of the medical profession that medicine should continue to hold out these attractions of a liberal profession, to the end that there will come into it the sort of men it gets now. Even today the excellent services of the medical departments of the Army, the Navy and the Public Health Service have difficulty in getting the high standard of men they want and in holding them after they get them, even though they have assured positions for life.

"In contrast to medicine as an independent profession we have an equally useful profession in that of teaching, which has state control. That profession is now largely turned over to women and men who use it as a stepping stone until they can get into the callings of their choice.

"Those Americans who have been here long enough to be imbued with the genius of the country do not readily adapt, if they are competent and able, themselves to bureaucratic control of their occupations, or to outside dictation of their actions in their professions. Physicians are not pleased at such a prospect.

"Considerations of this general sort make the vast majority of physicians opposed to control by the machinery of socialism, not to say Communism. They think it would be demoralizing to the profession and reduce it to a horde of dependent subservient employees, dominated by political control. And that is not a role to attract men we have in medicine now and hope to have in the future."

N. E. Melencamp, M.D., President.

---



---

## EDITORIAL

---



---

### U. S. P. H. A. MEETING

The high point of the recent convention of the United States Public Health Association at Kansas City was the Wednesday meeting to consider the public health aspects of medical care. Mr. A. J. Altmyer spoke on the National Health Conference and the Future of Public Health, approving a further expansion of governmental control of the treatment of the sick and the providing of governmental sickness insurance to all "low income groups". He did not define what he meant by this term but among proponents of this scheme, it is generally understood that it will cover all persons receiving \$3,000.00 per annum or less or roughly ninety-five per cent of the population.

Dr. Irvin Abell in a masterly address, told of the accomplishments of medicine, its experimentation in hospital and group insurance, and its acquiescence in principle to all of the points adopted by the National Health Conference except that of governmental sickness insurance offering the substitute of indemnity insurance by stock companies or prepayment to some unit of medicine.

The concluding main address was by C. E. A. Winslow, Dr. P.H. of Yale University who vigorously championed governmental medicine, lauded Drs. Peters and Cabot as the heroes of the year, and said that it was no business of the medical profession how it was paid.

Later in the meeting, however, the association endorsed all the recommendations of the National Health Conference except with respect to sickness insurance. On this issue no action was taken, contrary to statements in the public press, so there is still justifiable hope for cooperation between the A.P.H.A. and the A.M.A.

Four discussions of the above talks were given by the following: Fred K. Hoehler, Forrest L. Loveland, M.D., Edwin H. Schorer, M.D., Dr. P.H., and Martha M. Eliot, M.D. It is felt that all physicians in Kansas will be interested in Dr. Loveland's remarks and thus his paper is printed below:

"For the past eighty years, members of The Kansas

Medical Society have been serving the known medical needs of Kansas people. During this interim of time many public health problems have arisen, some of which, thanks to medical research have been solved, while others remain to challenge our best efforts.

The problem of affording medical care to the indigent sick has long since assumed major proportions. Kansas, with a population of 1,824,000 has a relief load of 150,000 all categories included.

The Kansas Social Welfare Act enacted during the 1937 session of the Kansas Legislature provides that the Kansas State Board of Social Welfare shall co-operate with county boards in developing plans financed by county funds for provision of medical care to needy persons. In an effort to comply with this provision of the law, the State Board of Social Welfare named a special committee composed of county commissioners and welfare directors representing the six districts of the state together with four members of The Kansas Medical Society to study indigent medical care in the state and make recommendations it believed were indicated.

The following resolution was adopted, 'Resolved, that in the opinion of this committee the most feasible and desirable county plan for supplying medical care to public assistance recipients is by means of a contract between the county board of social welfare and the members of the county medical society organization, the physicians included in the contract to be compensated for their services on a lump sum or controlled fee schedule basis by the county board of social welfare.' Another resolution designed to facilitate an orderly operation of the plan was passed; 'Be it further resolved, that in the opinion of this committee the effectiveness of any county medical plan can be increased by the establishment of a committee of physicians as a liason committee between the county board of social welfare and the physicians practicing medicine within the county.'

This is our method of procedure at the present time. It is not new, neither is it perfect. It has advantages as well as disadvantages. Fifty-one of our counties have adopted the plan. Forty counties in this group prefer to operate under the controlled fee schedule method, while eleven counties have chosen



the lump sum method of payment. We have five counties wherein full-time county physicians are employed to care for the indigent sick, and forty-nine counties employ part-time physicians for the same purpose. The indigent sick despite rules and regulations, gravitate to the physicians of their choice in time of need. This custom has always prevailed, may it continue to do so. The part-time county physician scheme for caring for the indigent sick is on its way out in Kansas. Personally, I believe the same verdict applies to the full-time county physician.

Kansas medicine is open minded in its search for a better way. We cannot sanction a plan unless it has incorporated within its provisions the ethical principles and practices of medicine. We sincerely believe that any effort to establish political control over this, or any other public health program, will fail miserably in Kansas as elsewhere.

There is a potent reason for this belief inasmuch as a high percentage of Kansas people are children or grandchildren of a hardy, pioneer stock who believe, unreservedly, in American institutions, American customs and the American way of living and doing, consequently, their heritage is such as to cause them to rebel against the invasion of foreign born ideas which would in any way limit their freedom of thought or freedom of action.

This, I say, is their heritage. It does not follow that the Kansas Jayhawkers have no bad habits. We have acquired medical service, hence, in isolated instances, preventable and curable diseases may terminate disastrously. An alarmingly high percentage of all people, not alone in Kansas, derive their medical education from quack advertisements appearing in the newspapers or periodicals. Information thus acquired is in reality misinformation. Dangerous delays occur, mental confusion abounds and the side-stepping of health issues is the invariable result. What a boon it would be to humanity if quackery in all its vicious forms could be eradicated from the face of the earth. The American Medical Association has been fearlessly attacking this problem for many years. Until it is effectively disposed of all public health issues will suffer. The gullibility of people in want cannot be overestimated.

Lay education is one of the greatest needs of today. To treat syphilis or tuberculosis, to adequately care for the expectant mother or her baby upon ar-

rival, to upbuild the under-nourished child, to care for the aged, the blind and the deaf is not too difficult a problem, but to persuade them to continue treatment as long as it is indicated, to cause them to seek medical advice in the early months of pregnancy or in the earliest stage of cancer or indeed whenever mental or physical disaster threatens, is a most perplexing problem. This is absolutely not a service problem. It is an educational problem. It seems to me that there is a moral obligation to be exercised which lies outside as well as inside the ranks of organized medicine. To educate is to exercise that moral obligation.

### THIRTY-ONE YEARS AFTER\*

After thirty-one years of Christmas Seal experience, I still find myself going back to that memorable campaign of 1907, when the Seal Sale was but an idea and our selling argument a promise. And yet that first campaign in Delaware that netted \$3,000 taught us many things.

The few following excerpts were written not one year ago, or even ten years ago. They were written and published in *The Outlook* on October 3, 1908. They are still applicable today. For instance: "To begin with, the design of the Christmas Stamp was made for love, the printers issued it at cost, and the advertising department of a great company prepared the advertising campaign as a free gift. The street cars carried its muslin banners on their fenders for a fortnight, and the drygoods stores gave the muslin."

"The first stamps were out on December 7—eighteen days before Christmas—but it was a mistake in hustling America. It was too late, for America begins to buy Christmas Seals in November."

"The seed, however, germinated under favorable conditions. What grew from it in the three weeks before Christmas last year was like Jack and his Beanstalk—a sort of holiday fairy story."

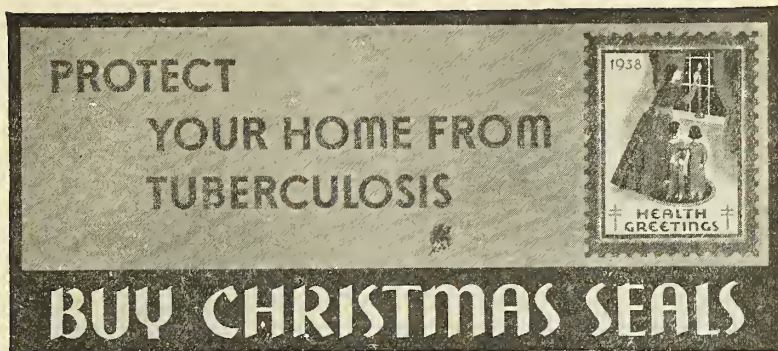
Today it is not necessary to sell seals on a promise alone. The promise made by the "little messenger of health" has been replaced with astounding results. Slicing off two-thirds of the tuberculosis mortality rate, the saving of hundreds of thousands of human

\*By Emily P. Bissell of the National Tuberculosis Association, New York, N. Y.

lives, the erection of sanatoria, preventoria, the maintenance of nursing service, the education of the public, the tuberculin test and x-ray are monuments to a promise made good. We know that the modern weapons of warfare are available, if we but provide them.

The Christmas Seal gives the public an opportunity to have a part in continuing and expanding the fight against one of the world's most devastating enemies. The anti-tuberculosis program, its needs and its accomplishments are so closely related to the annual Christmas Seal Sale that it is impossible to divorce them. I have said many times and I should like to repeat that the Christmas Seal was not meant to be a money-raising idea alone. My first thought was that the Christmas Seal should be an educational medium for informing the public of the need for concerted action.

Today our year-round activities and educational campaigns make the public fully cognizant of the need to buy seals. In 1907, I said that a liberal share of credit for a successful Seal Sale should rest upon the shoulders of the press. Today, I am still of the same opinion.



disease, it is neither unethical nor fictitious to advance hope, and to promise recovery in a great many instances.

The anticipated improvement of prognosis cannot be attained unless opportunities are afforded the profession to deal with the atypical factors that antedate cancer. The adolescent cancer is a vicious scavenger that shuns publicity and quietly defies detection. The control of cancer therefore challenges everyone to invite recognition and timely correction of precancerous lesions.

The modern campaign to control cancer is essentially an extension program of cancer education. This program is conducted by a large army of anti-cancer crusaders employed throughout the nation to acquaint everyone with cancer facts, and to keep them posted on the recent and more cheerful news of the campaign. The objective of this campaign is not merely to improve prognosis by palliative procedures, but to improve the forecast by reducing the incidence of cancer.

The crusaders have been encouraged by the manner in which the potential prey of cancer has accepted this information. The public has especially welcomed the things that are of good report, and they are less reluctant to believe that, "Things out of sight should be out of mind." They are more familiar with the early signs of factors that favor the development of cancer, and less prone to neglect such conditions.

---

## CANCER CONTROL

---

### CANCER OF THE PROSTATE SEMINAL VESICLES — TESTES

O. W. Davidson, M.D.

Kansas City, Kansas

#### PROGNOSIS

It is apparent, from a critical review of recent literature, that there is no impending danger of universal cancerization. The prognosis of cancer is decidedly more cheerful than it was a generation ago, when practically every diagnosis was accepted as a death sentence, and obituaries were frequently pre-designed on that basis for an untimely demise.

The merciless advance of this pernicious invader has been halted, and is being held in abeyance by the allied forces of modern science and public concern. In the light of present knowledge concerning this

The incidence of prostatic malignancy is higher than generally supposed. Cancer of the prostate before age seventy-five is a certainty for approximately seven men out of every one hundred, and a potential danger of thirty-five per cent of all men. Authorities agree that chronic prostatitis is the chief predisposing factor to hypertrophy, and that a malignancy develops in twenty per cent of all enlarged prostates. At least ninety-five per cent of these malignancies infiltrate the periprostatic structures or spread to remote areas, without producing classical symptoms of prostatic disease. In practically every instance, therapeutic

#### CANCER OF THE PROSTATE



efforts have been directed to the relief of remote or atypical prostatic symptoms before diagnosis. It has been found that approximately thirty-five men out of one hundred, at age sixty, have some bladder neck obstruction, and that less than half this number are likely to experience symptoms of prostatism. The average age at diagnosis is sixty-five, and approximately seventy-five per cent of these neoplasms develop in men between fifty and seventy-five years of age.

Cancer of the prostate should be suspected in any man past age fifty, who complains of lumbar or sciatic neuralgia if the symptoms are associated with any prostatic changes. In the diagnosis of prostatic changes, most reliance should be placed on the findings afforded by a careful digital examination and the presence of residual urine in the bladder. There are two chief types of malignant enlargements; i.e., (1) the type that tends to metastasize early, is usually small, lacks the characteristic areas of stony hardness, and has an even contour that can be outlined rather easily with the finger, (2) in the other type, any degree of enlargement may be found, depending on the stage of the disease. This type is usually irregular with areas of stony hardness, tends to infiltrate the periprostatic tissues, and produces obstruction.

Once the diagnosis is made, there are three chief problems to deal with in these cases; (1) control, or elimination, of the growth, (2) relief of the obstructive symptoms, and (3) relief of symptoms due to metastasis.

An enucleation of the prostate is a futile operation in practically every instance in the presence of lymphatic or osseous metastasis. These cases are ideally suited to transurethral procedures, which yield the maximum comfort for a minimum of surgery. External roentgen ray therapy after transurethral correction of the obstruction is generally considered to be the best palliative method to relieve pain and retard the progress of metastasis. Palliative procedures, such as conservative suprapubic or perineal surgery, with or without x-ray and radium, yield only partially satisfactory results.

According to some authorities, there are two clinical types of prostatic cancer that are suitable for irradiation; i.e., (1) those suitable for palliative therapy only, in which the tumor is more than five cm. in diameter, and in which there is probable or demonstrable metastases, and (2) those suitable for radical therapy plus external irradiation and radium implantation, in which the tumor is less than five cm. in diameter, and without evidence of metastasis.

A number of cases have been recorded recently in which three- to five-year periods of relief has been obtained by means of transurethral surgery, in conjunction with radium and deep roentgen ray therapy.

More time must elapse before we can determine the permanency of relief by such methods.

It is not likely that anyone will ever advocate a prostatectomy for every man in his fiftieth year, however there are many reasons to justify early enucleation of every enlarged prostate; i. e., (1) patients are usually good operative risks in the precancerous age, (2) many post-operative specimens, supposedly benign, conceal incipient malignant changes, (3) new growths seldom, if ever, develop in the post-operative bed of a benign prostate that has been carefully removed, (4) it is difficult and frequently impossible to differentiate a confined neoplasm from a benign lesion in a large gland, and (5) a true recurrence of prostatic obstruction is exceptionally rare.

While we determine the extent to which the prognosis of prostatic cancer will be improved by the early transurethral correction in conjunction with deep roentgen ray therapy; every man should be acquainted with the virtues that attend periodic examinations and the timely elimination of all predisposing factors favorable to the development of cancer. The odds are four to one that practically every potentially malignant prostate would be removed if all men, with chronic prostatitis or enlargement, would submit to a prostatectomy during the precancerous stage.

#### CANCER OF THE SEMINAL VESICLES

The literature is very brief on this subject. Primary tumors of the seminal vesicles seem to be of very rare occurrences. Up to 1926 there was only one benign and seven malignant tumors reported in the world's literature. New growths of the prostate frequently invade these structures very early without producing evidence of urethral obstruction. The seminal vesicles are the seat of tumor extension in approximately sixty per cent of the advanced prostatic malignancies.

#### CANCER OF THE TESTES

Authorities agree that approximately all testicular tumors originate in aberrant sex cells, and that at least ninety-six per cent are malignant. In a series of one hundred testicular cancer cases, reported recently by E. Ross Mintz, the incidence and symptoms given were as follows: (1) Non-testicular in thirty-seven instances, (2) Testicular enlargement in thirty-two cases, (3) Testicular and non-testicular evidence in fourteen, (4) Trauma history in eight, and (5) No symptoms noted in the other nine cases. He also found, in a series of urogenital cancer cases, that twenty-three per cent of the renal, twelve per cent of the prostatic, and thirty-seven per cent of the testicular neoplasms, escaped diagnosis until after the condition was in an advanced stage with evidence of metastasis.

It is essential therefore, to the solution of this phase of the cancer problem, that more critical attention be directed at an early stage to any deviation from the normal of either testicle. Neoplasms of the testes comprise less than 0.6 per cent of all malignant tumors of man, and they occur more commonly than new growths of the epididymis, tunica, and vas deferens. A testicular swelling, associated with an intrinsic neoplasm, is usually observed in an adult patient, but infants and adolescent boys are not immune to such pathology.

The differential diagnosis of a testicular swelling is frequently quite a baffling problem. In many instances, the tumor change is painless, and a cursory examination of the prostate and scrotal contents will fail to reveal the true significance of the lesion, or the identity of associated remote pathology. A gumma frequently simulates testicular neoplasm, and a new growth may coexist with a gumma, or develop independently, in a luetic individual. The problem of diagnosis may be complicated in other cases when the neoplasm is associated with a tubercular infection. The primary testicular swellings must be differentiated from other swellings associated with local or general systemic infections; i.e., prosto-vesiculitis, parotitis, malta fever, acute febrile conditions, etc.

The scrotal contents are easily accessible for examination by palpation plus trans-illumination, and the emergency is rare that contraindicates a proper differential diagnosis. If infection and trauma are ruled out after the swelling has localized in the testicle proper, there is no alternative for a diagnosis of malignancy. The pathological type and relative resistance to roentgen ray therapy can be determined by a quantitative estimation of the Prolan A excretion. It may be that more of these tumors will be differentiated before operation with the simplification of this test.

Surgery and irradiation are the accepted methods of therapy at present. Popular therapy procedures are listed as follows: (1) Orchidectomy, followed by x-ray is the most common and conservative procedure, and approximately thirty-three per cent of these cases survive three years or more, (2) pre and post operative irradiation is advocated by good authorities, who contend that the chance of post operative metastasis is minimized by the preliminary irradiation, (3) radiation treatment alone has been reported in one series with metastases; there were twenty-one per cent of these men living and free from diseases at the end of five years, (4) Orchidectomy, with radical extirpation of the lymphatic structures, yields an immediate mortality of near ten per cent, and the patients chance to survive beyond a year is about fifty per cent, (5) simple orchidectomy assures only about twenty per cent chance for cure, and (6)

castration, plus the use of Coley's serum has met with some favor, but few operators attach much value to the serum treatment.

---

## MEDICAL ECONOMICS

---

### COOPERATIVE MEDICINE

The following article entitled "The Family Doctor As Related to Group Insurance Plans" written by Dr. L. H. O. Stobbe of Salt Lake City, Utah, appeared in the August 1938 issue of "The Bridge Magazine". The subject is of particular interest to the medical profession and is therefore reprinted thru the kind permission of Dr. Stobbe:

"The many articles appearing recently in the "Bridge Magazine" concerning Group Health Insurance and Group Plans for Hospitalization, and the generally conceded drifting by the general public toward State Medicine or Panel Systems, calls for an authentic answer and inspires me to write this article, I hope will present the true nature of the medical profession as related to the public generally.

At the outset may I state that I am a firm convert to the Credit Union movement. I have preached this idea before the Federal Credit Unions were organized; I began the movement among the American citizens of German extraction in Utah; and was very instrumental in organizing the Utah German American Federal Credit Union, affiliated nationally and locally with the entire movement, and I have a great deal of money invested in the cause. I attend your conventions, banquets, committee meetings, and all, as well as acting as chairman of the Board of Directors of our own local Credit Union and subscribe to all its principles.

### REGIMENTATION

Now, leaving all laurels off, let's discuss this co-operative health movement frankly. In this present whirl of regimentation, organization, and group plan movement—all designed for greater efficiency, better protection, and cheaper rates, we are apt to lose the human side of things and even treat health or disease as an inanimate abject thing—an entity just like groceries, clothing, money, or other material things. Of course that is absolutely wrong, and that is just why I write this article. Sickness is a human affliction and needs the human understanding doctor's attention, his sympathy, his kindness, his gentleness, his complete 100 per cent loyalty, his 100 per cent interest in the personal welfare, his far superior knowledge of diseases and his skillful experi-



ence in handling all situations. In time of serious illness we need a physician in whom we have complete confidence. We trust our life, our everything, to him. We then have no time for charlatans, for dishonest "doctors," or for half hearted botchery. We then must have the best at any price—the keenest mind, the most skilful hand, and the most honest heart. We must have responsible, reliable, intelligent help—alert to all detail and able to guide us safely through our affliction in the least painful way at the fastest possible speed.

Therefore it is self-evident, whenever we but stop to think, that the family doctor is indispensable—and that he is the hub of any health or hospitalization plan. His services just can not be mechanized. His every act is to the individual, and not in groups. All broken legs are not alike, nor to be handled alike; all babies are not born the same way; all medical diseases vary; and all surgical conditions vary. His opinion on how to attack each individual problem becomes very essential.

Group regimentation and group regulation of patients is designed and bound to break up the essential relationship bond between the family doctor and his patient—and when that relationship falls, the entire new grouping system is doomed to failure. How could a group of laymen, who do not understand the real problems, compel a first-class red-blooded American family doctor to give good service in any given case, if his heart is not in it? And how would they know if his services were good? Is it not human to please the person or the group that pays the bill? Would he not be led to be partial to the Group Insurance Plan which pays him, and gradually lead into indifference to the individual patient?

### THE OUTCOME

Would not the whole scheme degenerate to a semi-charity or charity service system on the part of the doctor after all? Would any good doctor give his very best where he is forced into some plan that curtails his free-agency? I am afraid that it would all degenerate to a report-blank filling type of service as was the case with the F.E.R.A.

Many small sporadic insurance group companies are springing up all over the country at present and the public is gullible enough to fall for these fly-by-night promises. After these companies have made their stake they even become indifferent, and many of them run against insurmountable snags in the matter of caring for their customers. About the time the first suit comes up against them, they usually give up the ghost, leaving the poor public to again shift for themselves as best they can. I personally was offered one such job recently which might illustrate a point or two. A bishop and his two ecclesiastics

had recently seen Group Insurance Plans which they worked up, and in all sincerity thought them to be beneficial to their ward membership and cooperative community, and they then called on me. I was offered \$1,000.00 a month when the plan was to get under way. That is, they were to collect \$2.00 per family per month, of which I was to get \$1.00, and they would get the other dollar for handling the business. And since they were assured over a thousand families through their salesmen within thirty days I would be guaranteed a minimum of a thousand dollars with chances for more than that. At first they thought I should be honored that they picked on me to give me such a wonderful salary proposition, but they were soon told that I would not accept their offer. I was to be fully responsible for the lives of a thousand families or more for my salary, and they merely had the collection overhead to worry about! The public would pay for two dollars' worth of medical service and only receive one dollar's worth in return. They would corral all business my way, force people to come to see me whether they liked my services or not, and collect money regularly, creating good jobs for themselves out of the medical money! The idea was so unsound that I told them that no ethical physician would accept such schemery. They have now abandoned their fine plan and are no longer interested in benefiting mankind with their health insurance plans.

Now then, if the State should try to regulate all of this through new government bureaucracies, and the medical profession thereby relieved of all its charity and semi-charity work, utopia would result for the doctor, but what about the general public? Compulsory health insurance for the entire nation would be a fine thing for the doctor—he would get paid every time, but what about our free-agency? Socialized medicine is communistic medicine, and once the State takes this over, it might as well take over all our other activities and business too. And why should the Government take over billions of dollars worth of charity work annually, when it is receiving, and always has received it gratis and perfectly willingly from the medical profession?

No profession has sacrificed so much on the altar of Charity, Altruism, and Service as the medical profession. Constantly giving the very best they know, healing as fast as they can, teaching the public how to prevent and avoid repeated pitfalls, and thus constantly working to their own economic detriment. Modern medicine has no secrets. All doctors willingly impart all they know to each other and to the public at large. There are no fakirs in the medical profession. Why then should lay-organizations and lay-bureaucracies prescribe for these altruistic highly

trained men who are bound by an oath to do justice at all times. Only chaos shall result with such interference unless it be guided properly by the physicians and surgeons who do the work and fully understand the problems involved. The American Medical Association has plenty of efficient men for the job.

Therefore now, let us look at the real issue from the doctors' point of view still further. First, I would say, that all of this present prevalent discussion of economics is relegated in the back, obscure, secondary part of the family doctors' daily mental grind. He is notoriously a poor business man—chiefly of his own choice. He never lets anyone suffer. Practically always, he does his work first without thoughts of pay.

The aim of each physician and surgeon is to prevent disease; to cure the sick; to alleviate physical suffering and mental anguish; and to make life longer, happier, more tolerable, and more efficient. There is no adequate compensation for a lifetime devoted to the practice of medicine, except that derived from the satisfaction inherent in the fulfillment of these aims and the gratuity of those served.

The function of investigating disease, and treating the sick in the best way that true science proves to be correct, has been ever fostered by the medical profession and will never be abandoned. Our work and our scientific progress must go on. We will always deeply resent and unceasingly oppose any vagaries of political economy that interfere with the march of progress of scientific medicine.

Our oath stands as preeminent today as it did in the day of Hippocrates. Our code of ethics is not changing. And we stand by our oath and by our ethics no matter what the economic outcome may be.

American organized medicine is constantly seeking to formulate and apply a sound, safe, dependable program of service that will safeguard the American public economically, and at the same time maintain a high standard of medical service for all with the continuation of the scientific investigations and developments that have characterized the profession for centuries. By choice we seek to lead in any discussion that seeks to alter these fundamentals. No other body of men are legally or even educationally equipped to exercise control over this situation.

We demand that no profit-taking third party must be permitted to come between the patient and his physician in any medical relation; that the patient must have absolute freedom to choose his own family physician; and that the method of giving service must retain a permanent, confidential relation between the individual patient and his family physician. Any system of economic relief must na-

turally be limited strictly to the indigent, and medical services to these people must have no connection with any cash benefits whatsoever.

Now then in conclusion, I would like to say to our Cooperatives and Credit Union Members, that no true economic solution of the medical care problem has as yet been satisfactorily worked out through grouping insurances or through bureaucratic middleman regimentation. Beware of the money-making schemes when it comes to matters of health. It is as important to choose your family doctor as it is to choose your wife or husband. Once you find him, let him be your friend as well as your doctor. Any person with good character need never fear that his family doctor will ever turn him down in time of need, even if he has no money. Cooperate with your doctor honestly in solving your individual problems and you will be far ahead of any group prepayment plan ever devised. Don't let them make indigents out of you—it is going to be fashionable again to have a little honor, pride, and individual character.

"Bridge Magazine" readers are entitled to hear both sides of the "economic problem of medical care." If charlatans, quacks, cultists, patent medicines, and all unnecessary hangers-on of the healing art were eliminated in the U. S., and people would really cooperate with the ethical honest family doctor, they would have the lowest cost medical care the world has ever seen. No laymen would work as cheaply as the family doctor does and no layman would dare take the responsibilities.

---



---

## TUBERCULOSIS CONTROL

---



---

### RESULTS OF ARTIFICIAL PNEUMOTHORAX\*

George F. Aycock, M.D. and Paul E. Keller, M.D.

Bare composite percentage results in a group of cases do not reflect the true value of pneumothorax. To determine its efficacy the analysis must comprehend the varied pathological manifestations. This review of 530 cases of artificial pneumothorax induced at Fitzsimons General Hospital since 1931, undertakes the interpretation of results, primarily, on the basis of the dominant tissue reaction at the time pneumothorax was induced.

#### TISSUE REACTION TYPES

Dominant tissue reactions can be embraced in three general groups: Exudative, caseous pneu-

\*From the American Review of Tuberculosis, September, 1938. Reprinted in Tuberculosis Abstracts published by the National Tuberculosis Association.



monic and fibrocavernous. All lesions of reinfection have their inception as an exudative process. Such lesions show a tendency toward resolution provided the issue is favorable. This group includes the lesion often designated as "soft." Regardless of extent, the exudative reaction must be looked upon as a phase in tissue response to tuberculous infection (or reinfection). Sooner or later some sort of proliferative response occurs in all such lesions. It seems more reasonable, therefore, to describe such tuberculous lesions, not as exudative, but as in the exudative phase. Many exudative lesions appear to clear up with slight residuals while many others progress to tissue destruction, replaced or circumscribed by fibrous tissue.

The caseous pneumonic group is distinguished from the exudative by its greater intensity and, in some cases, the extent of the tissue reaction. Conditions favoring the origin of such lesions are those which effect a high and sudden concentration of tubercle bacilli within a tissue. Necrosis may follow with areas of excavation and resolution is seldom more than partial.

In the fibrocavernous group the dominant tissue reaction at the moment is proliferative and represents an effort to repair or circumscribe tissue damage. Areas of cavitation enclosed by fibrous walls are part of the picture. Such lesions constitute a menace because they are potential chronic suppurative foci, which may act as sources for future spread of the tuberculous infection.

#### WHEN COLLAPSE IS SATISFACTORY

The authors apply the term "satisfactory collapse" to denote that the desired degree of collapse of the disease area was obtained, with the closure of cavities, if present. Sputum conversion was made a requisite for classifying treatment results as satisfactory in those cases still under collapse, or still in the process of re-expansion.

Of the total cases (530) in which pneumothorax was induced, 301 or fifty-seven per cent, were classified as "satisfactory collapse." All of the minimal cases (there were only eighteen) eighty-six per cent of the moderately advanced and 44.5 per cent of the far advanced cases, were in the "satisfactory collapse" group. These results confirm previous observations by many others to the effect that satisfactory results in pneumothorax diminish in proportion to the extent of the treated lesion.

Of the entire exudative group, 73.5 per cent showed "satisfactory collapse." This was principally because of the nature of the lesions and the low incidence of dense pleural adhesions or symphyses encountered. Of the caseous pneumonic group (twenty-five cases) only twenty-eight per cent were satis-

factorily collapsed and of the fibrocavernous group, mostly far advanced cases, 26.5 per cent were satisfactory.

The fact that by far the largest percentage of satisfactory results was obtained in the exudative group, prompts the authors to meet the argument that in this group there is a strong tendency toward spontaneous healing and that, therefore, many such cases will recover without collapse therapy. "On this point," say the authors, "there is no argument. The problem which confronts us lies in the determination of those cases which may or may not terminate favorably under expectant treatment. The characteristic of exudative lesions which admits of little argument is that they do not remain stationary, as such, for any considerable period of time. These lesions usually establish a trend, either progressive or recessive, in a very short time, so that no protracted periods of observation should be necessary to determine this point. As an illustration, many of our patients at Fitzsimons General Hospital are soldiers sent from distant stations, including our overseas garrisons. Transfer clinical records and x-ray films accompany these patients. In most of the cases showing exudative lesions, we are able to determine their trend upon arrival at this hospital by comparing our findings, clinical and x-ray, with those noted at the home stations of these soldiers."

#### WATCHFUL WAITING NOT ALWAYS SAFE

It would seem, therefore, that the statistical argument in favor of artificial pneumothorax becomes strong in all exudative cases which have failed to establish a favorable trend. The contrast in the percentage of satisfactory results between far advanced cases of the exudative and fibrocavernous groups (sixty-two per cent and 26.5 per cent, respectively) leaves little to be said as to the choice of artificial pneumothorax as a therapeutic measure while the lesions are in the exudative phase. The percentage of satisfactory results in minimal and moderately advanced exudative cases should be even more convincing. In these groups, the highly satisfactory percentage results (100 per cent and 87.5 per cent, respectively) were obtained with inconsequential risk of untoward complications. Furthermore, the mere fact that a case may be classed as minimal or moderately advanced does not mean that it lacks the potentialities of a progressive lesion. It often transpires that the minimal or moderately advanced exudative case of today will be a far advanced fibrocavernous case a year hence. It would seem that such a patient who has been following a "watchful waiting" policy has paid dearly for the delay.

The relatively poor percentage results shown for the fibrocavernous group does not mean that such

cases should not be given the benefit of an attempt at artificial pneumothorax. However, it should be borne in mind in initiating the therapy in cases of this group that the chances of satisfactory results are less and that if a satisfactory collapse is obtained it must of necessity be maintained for a longer period of time than in the exudative cases.

### A PRELIMINARY REPORT ON THE USE OF CEVITAMIC ACID IN THE TREATMENT OF WHOOPING COUGH.

(Continued from page 469)

Case No. 16. W. O. Age seven years. Night cough for two weeks. Occasional vomiting. W B C 6,600. Lymphocytes sixty-two per cent. Symptom free in six days.

The succeeding ten cases were treated with different individual dosage using twenty-five mg. tablets.\*\*\*

Case No. 17. Baby P. Male, age two and one-half years. Ten days cough. W B C 26,400. Lymphocytes seventy-three per cent. Given one tablet t. i. d. Symptoms fifty per cent ameliorated in four days. Then developed an acute bronchitis with high fever. Subsequent recovery slow but no spasmodic coughing.

Case No. 18. Baby Z. Female, age two and one-half years. fourteen days cough and whooping three or four times a night waking for one hour each time. W B C 13,400. Lymphocytes sixty-six per cent. Given one tablet t. i. d. On third night of treatment cough not severe enough to awaken the patient. Free from cough in two weeks.

Case No. 19. Baby F. Age nine months. Cough two weeks, whooping. No blood count. Three tablets daily and completely symptom free by the fourth day.

Case No. 20. D. J. L. Female, age six and one-half years. Coughing and vomiting for three weeks. One tablet t. i. d. Vomiting for two weeks but not so often. Then symptoms rapidly cleared.

Case No. 21. B. W. Female, age four years. Coughing six days. W B C 13,200. Lymphocytes fifty-one per cent. One tablet t. i. d. Symptoms improved by third day, almost gone on the eighth day, completely gone few days later. Never whooped or vomited.

Case No. 22. M. J. L. Female. Age five years. Coughing four weeks, last two weeks of which she showed improvement on large amounts of orange juice. W B C 10,800. Lymphocytes fifty-one per cent. One tablet t. i. d. Gave almost immediate complete relief.

Case No. 23. M. B. Male. Age twelve years. Two weeks coughing. W B C 13,400. Lymphocytes fifty-

two per cent. Given three to nine tablets daily. After three days of treatment cough almost completely checked having nine paroxysms in the next ten days where previous to treatment had had nine to twelve paroxysms daily.

Case No. 24. B. L. Female. Age eleven years. Coughing two weeks. Eight to ten paroxysms daily. W B C 12,000. Lymphocytes sixty per cent. Three to nine tablets daily, after three days one paroxysm at night and one daily. Continued an occasional cough for three weeks.

Case No. 25. C. D. Female. Age nine years. Sister to above two cases. Had similar symptoms. No blood count taken. Given three to nine tablets daily. Showed little improvement, running usual course of six to seven weeks.

Case No. 26. D. C. Male. Age three years. Whooping and coughing for five weeks. Had had x-ray treatments with little success. Given one tablet four times a day. Showed immediate remarkable relief. No cough at the end of one week.

### CONCLUSIONS

In this small series of twenty-six cases of whooping cough, cevitic acid seemed to be strikingly effective in relieving and checking the symptoms in all but two of the cases which apparently received little if any relief. It is our opinion that it should be given further trial in all cases of whooping cough regardless of the age of the patient, or the length of time already elapsed since the original symptoms.

### REFERENCES

1. Otani, T.: Vitamin C Therapy of Whooping Cough, *Klin. Wechschr.* 1936, 15: 1884 (Quoted by Ormerod & Unkauf.)
2. Ormerod, M. J. and Unkauf, B. M.: Ascorbic Acid (Vit. C) Treatment of Whooping Cough. *Canadian Medical Association Journal* 1937, page 134.
3. Ormerod, M. J., Unkauf, B. M. and White, F. D.: A Further Report on the Ascorbic Acid Treatment of Whooping Cough. *Canadian Medical Association Journal*, September 1937, 268.

---

## NEWS NOTES

---

### OSTEOPATHS

The Kansas Supreme Court handed down the following order in the case of State vs. Gleason on October 18, 1938:

"The opinion of the court was delivered by

HARVEY, J.: At the time defendant filed his motion asking the court to determine certain questions of law prior to the trial of issues of fact, which motion was allowed, and later the questions submitted were briefed and argued and in due time determined in our opinion (State, ex rel., v. Gleason, 148 Kan. 1, 79 P. 2d 911), defendant also filed a motion for judgment on the pleadings. This motion was held in abeyance pending the determination of the specific ques-

\*\*\*Cevitic Acid used in the last ten cases was Parke, Davis & Company brand, twenty-five mg. tablet.



tions submitted. At the close of our opinion on these questions (148 Kan. 1, 15, 79 P. 2d 911, 920), we invited suggestions of counsel as to what further orders should be made or proceedings had in the action. In response to this invitation plaintiff filed a motion for judgment on the pleadings in harmony with the court's opinion. Defendant, without withdrawing his motion for judgment on the pleadings, filed a motion for the appointment of a commissioner to take evidence and make findings of fact and conclusions of law. He also filed a motion for rehearing. Thereafter, having considered the matter, the court overruled the motion for rehearing and set for hearing in open court, upon briefs and oral arguments, the motions of the respective parties for judgment upon the pleadings. In doing so we invited counsel to suggest, and if possible to agree upon the form of an appropriate decree in harmony with the opinion of the court. In the order for this hearing it was pointed out that if the motions for judgment were sustained there would be no necessity of considering the motion for the appointment of a commissioner, but if counsel desired to press that motion it would be heard on the same day, and in that event the court would like counsels' views as to the matters to be inquired into by the commissioner.

Upon the hearing of these motions we were informed by the assistant attorney general, who has handled the case on behalf of plaintiff from the beginning, that this action was brought at the request of those licensed in this state to practice osteopathy, including the defendant, and for the sole purpose of having the decision of this court upon the major questions of law involved, which questions were formulated by defendant and were submitted to the court and decided in its opinion, *supra*; and that it was not contemplated to ask the court in this case to go into the details of the narrow field where the two systems of healing, otherwise well outlined as being separate and distinct, might have some things in common, and to say that a specific act or thing could or could not be done lawfully by an osteopath. These statements as to the circumstances under which the action was brought, and the purposes it is designed to accomplish, were not controverted by defendant. We think, therefore, that final judgment should be entered in this case in harmony with our opinion, *supra*, and that the motion for the appointment of a commissioner should be overruled.

In its petition plaintiff alleged defendant owns and operates a hospital in which he practices medicine and surgery generally and in which he permits other persons licensed only as osteopaths to practice medicine and surgery generally. We are asked to oust defendant from so practicing medicine and surgery in his hospital, and this will be done. We are asked also to oust him from permitting others licensed only as osteopaths to practice medicine and surgery generally in his hospital. We decline to make that order since it would require defendant to watch continuously what other licensed osteopaths are do-

ing in his hospital. We think that burden should not be put on defendant; that those licensed as osteopaths only should guard their own conduct in this respect. The hospital, of course, may be operated lawfully for the practice of osteopathy. Persons licensed only as osteopaths, if heretofore mistaken as to their authority with respect to the practice of medicine and surgery, and who because of such mistake had extended their practice into a field in which they are not authorized to engage, should, and in all probability will, hereafter conform their practice to the science or system of osteopathy as distinct from the practice of medicine and surgery, in harmony with our statutes as construed in our opinion in this case. If defendant, or any other person licensed only as an osteopath, should fail to confine his practice of the healing art to the science or system of osteopathy, as that term is used in our statutes, as interpreted and construed in our opinion, any remedies the state or others have with respect thereto are not abrogated or decreased by anything we have said in this case.

Therefore, it is by the court considered, adjudged and decreed that the defendant, B. L. Gleason, be and he is hereby ousted from the practice of medicine and surgery; and it is further adjudged and decreed that under his license to practice osteopathy he is limited in the practice of the healing art to the practice of the science or system of osteopathy authorized by our statutes pertaining thereto, as such statutes have been defined and construed in the opinion of the court heretofore rendered in this cause.

The motion for the appointment of a commissioner is overruled."

This order, it is believed, definitely completes the Gleason case. The order seems to be clear on every point and in conjunction with the opinion on the same subject handed down by the Supreme Court on June 11 apparently offers a complete definition of the practice of medicine and surgery in Kansas.

### A. M. A. SURVEY

The following bulletin was forwarded to the county medical societies pertaining to the A. M. A. Survey:

As you probably know, the Board of Trustees of the American Medical Association has recently decided that it will conduct a survey of the need and supply of medical care in the United States.

Plan of the survey is that the American Medical Association will supply a series of questionnaires to each of the various state medical societies; that the state societies will distribute these to all county organizations; and that the county organizations will secure and summarize the information necessary for completion of the survey.

Purpose of the survey is two-fold:

1. To provide information wherein the medical profession may make definite and accurate reply to certain present allegations about the adequacy of medical care.

2. To acquaint the medical profession itself with any inadequacies which actually exist in order that correction may be made.

In other words, the taking of a national inventory

wherein medicine may refute, beyond doubt, many statements now being made, and wherein it may also further strengthen itself by correcting any sectional or local shortcomings which are found to exist.

I. Description of Questionnaires: The questionnaires included in the survey are as follows:

1. A form requesting information about medical and dental practice in your county which is intended to be filled out individually by your members and your local dentists.

1F. A form to determine the amount of free medical and dental service provided in your county. It is intended that one copy of this form will be given to each member and dentist in your county; that each member and dentist will be asked to keep a desk record of the information requested therein from November 1 to November 7; and that each will be expected to complete and return the form to his county medical society secretary or official representative as soon as possible after November 8.

2. A form to compile hospital information. One copy to be furnished to each hospital in your county for completion and return to the county secretary or official representative.

3. A form to determine the adequacy of nursing service in your county. One copy of this form to be completed by a nurse, a committee of nurses, or all nurses in the county.

4. A form pertaining to county health department activities. One copy of this form to be delivered to your county for completion and return.

5. A form to determine medical assistance provided by public or private agencies. One copy of this form to be delivered to your county welfare director with the request that he complete and return the information. Likewise, if there are other agencies in addition to the county welfare board supplying medical assistance in your county it is desired that one of these forms be completed for each agency. (Red Cross, city clinics, civic clubs, and other agencies with some kind of headquarters or organization in your county.)

9. A form for information about drug school health service (below college or university level). One copy of this form to be delivered to the superintendent of your public schools with the request that he complete and return the information. Another copy to be delivered to the Catholic representatives in charge of parochial schools for the same purpose.

7. A form to provide information about college and university health services. This questionnaire will be distributed by the Society central office directly to all colleges and universities in the state. Replies will be obtained and tabulated by the central office.

8. A form pertaining to medical services provided through group of cooperative systems. This information to be compiled at a meeting of your members.

9. A form for information about drug services. One copy of this form to be completed by each drug store in your county.

S. A summary form wherein after all of the

questionnaires are completed and returned, a committee of your members should evaluate and tabulate the information furnished therein, obtain any other information necessary, and prepare a complete and accurate summary report of the conditions found in your county.

Following completion of the summary, one copy of form S should be attached to the supporting questionnaires and be retained in your county society files; the second copy should be sent to the Bureau of Medical Economics, American Medical Association, 535 North Dearborn, Chicago, Illinois; and the third copy should be sent to the Society central office.

## II. Miscellaneous Information and Suggestions.

1. Estimates have been made of the number of questionnaire forms each county will need to complete the survey. These have been forwarded herewith to the county medical society secretary or official representative of each county. If the estimate for your county is incorrect, or if additional forms are found to be necessary, the Society central office will supply any amounts desired.

2. It has been decided that Kansas should conduct its survey on the basis of individual counties rather than upon the basis of county medical societies. Reason why this is deemed advisable is that Kansas does not have a county medical society in every county, and that it would therefore be difficult for a county medical society with members in several counties to obtain as complete information as can be obtained in individual counties. Hence the secretaries of the county medical societies are requested to arrange a meeting of their own counties for institution of the survey, and the official representatives are requested to call a meeting of their counties and to supervise the survey therein.

3. It is believed that it will be difficult to obtain return of form 1 (medical and dental practice), form 3 (nursing), and form 9 (pharmacists) if they are merely distributed to members, dentists, and pharmacists with the request that they be completed and returned. It is also believed that there are some questions included in these questionnaires which will be difficult to answer on a definite and detailed basis. In an effort to minimize these difficulties, the following method is suggested:

That each county call a joint meeting of its members, dentists, nurses, and pharmacists.

That particular effort be made to have all members of those professions in your county attend.

That the instruction pamphlets be read at the meeting to explain the survey and the information desired.

That following a complete explanation, the members, dentists, and pharmacists, and the nurses as a group, be requested to prepare their questionnaire at that meeting.

That where members, dentists and pharmacists find it impossible to answer particular questions, discussion be had at the meeting as to best ways to estimate this information. (Possibilities: Estimate of number of patients



in an average week and multiplication of this amount by fifty-two; estimated percentage of patients who present themselves in third month of pregnancy; estimated number of prescriptions in an average week and multiplication of this amount by fifty-two; etc.)

4. Questionnaires furnished by members, dentists, pharmacists, and nurses need not be signed.

5. It seems probable, also, that form 8 (group services) can be more easily and better answered at a meeting of members held in your county. It is suggested, therefore, that this form be read at the above meeting; that members report orally the information they are able to give on this subject; and that the form be completed at the meeting in this manner.

6. Form 1F (amount of free service) obviously cannot be handled in any other way than by individual distribution to members and dentists. It is suggested that this be done at the above meeting; that the dates of November 1 to November 7 be adopted throughout the state as the test period; that each member and dentist be strongly urged to keep a desk record of free service during that week; and that each be asked to cooperate in returning the completed form to his secretary or official representative immediately after the latter date.

7. It is further suggested that a committee of members be appointed to distribute copies of form 2 (hospital), form 4 (health departments), form 5 (public and private agencies), and form 6 (school health services) to the proper sources of information; that this committee explain the importance of the survey to these persons; and that it arrange to obtain return of the completed forms.

8. Following completion of all forms, a committee of your county should complete the summary (form S) to the fullest degree possible. Thereafter, one copy of the summary should be mailed to the Bureau of Medical Economics of the American Medical Association, and one copy should be mailed to the Society central office. The remaining copy should be attached to the questionnaires, and be retained in your county society files.

9. The dead-line established for completion of all summaries in Kansas is December 31, 1938. It is requested, therefore, that all counties hold as early a meeting as is possible on this subject, and that they attempt to complete their portion of the survey as soon as they can.

### III. Importance of the Survey.

There is no doubt but that this activity satisfactorily accomplished will entail a great amount of work for the members of your county. It should be remembered, though, that the information included in this survey will enable the medical profession to definitely prove many contentions which are now difficult or impossible to prove through lack of detailed information, and that ability to prove the adequacy of present medical service is the foremost requisite for the profession to bring about public opinion against socialized medicine. It should, also, be remembered that for the survey to be successful every county in the United States must participate to the fullest extent in doing its part. Otherwise, only incomplete figures can be cited, and medicine will be accused of being unable, in

its own survey, to prove its point.

For both of these reasons, your committee urgently requests that you do everything within your power to make the survey a success in your county.

## ELECTION

The voters at the November 8 election chose to elect only one "doctor" to the House of Representatives of the Kansas Legislature. That person was D. B. Fordyce, an osteopath of Oswego. The following candidates were defeated:

F. S. Hawes, M. D., Russell County.  
T. C. Kimble, M. D., Cloud County.  
G. A. Leslie, M. D., Rawlins County.  
H. O. Blanchat, D. C., Sumner County.  
J. Romary, D. C., Coffey County.  
C. B. Pettit, D. C., Rice County.  
K. A. Bush, D. O., Harper County.  
C. E. Mitchell, D. O., Barber County.

Another race of interest to Kansas physicians was the one of Donald Muir of Anthony against Clark Wallace of Kingman of that judicial district. Mr. Muir who was opposed by the county medical societies of Harper, Barber, Kingman and Pratt Counties was decisively defeated.

## SCIENTIFIC EXHIBIT

Application blanks are now available for space in the Scientific Exhibit at the St. Louis Session of the American Medical Association, May 15-19, 1939. Attention is called to the fact that the meeting is a month earlier than usual, and applications close January 5, 1939. Blanks will be sent on request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

## DISTRICT ORGANIZATION

A Twelfth Councilor District organization was effected at a meeting of that district held in Garden City on October 30. Members of county medical societies of the eighteen counties in the district will be automatically designated as members and dues will be voluntary. Major purpose of the group will be to discuss business and economic problems. Three meetings each year will be rotated between Dodge City, Garden City and Liberal. Officers of the organization are as follows: Dr. G. R. Hastings, president; Dr. H. C. Sartorius, secretary; and Dr. G. O. Speirs, Councilor.

## POSTGRADUATE COURSE

A postgraduate course on obstetrics and pediatrics financed by funds available under the Social Security Act and sponsored by the Kansas State Board of Health in cooperation with the Society Committee on Maternal and Child Welfare, will commence in the western part of the state on November 28.

Dates and places of meetings are as follows:

Norton, Court House, November 28, December 5, 12, 19.  
Colby, O'Pelt Hotel, November 29, December 6, 13, 20.  
Garden City, St. Catherine's Hospital, November 30, December 7, 14, 21.  
Liberal, Epworth Hospital, December 1, 8, 15, 22.  
Dodge City, Lora Locke Hotel, December 2, 9, 16, 23.



# BENZEDRINE SULFATE TABLETS

'Benzedrine Sulfate Tablets' have now been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for use in the treatment of narcolepsy and post-encephalitic parkinsonism, and to facilitate roentgenologic examination of the gastrointestinal tract. The Council also recognizes the usefulness of 'Benzedrine Sulfate' in institutionalized patients for the treatment of depressive psychopathic states.

During the past three years, more than seventy original articles dealing with the uses of 'Benzedrine Sulfate Tablets' (amphetamine sulfate, S.K.F.) have appeared in medical and scientific publications.

The following would seem to be of especial interest at this time.

## NARCOLEPSY

ULRICH, H.: Narcolepsy and Its Treatment with Benzedrine Sulfate—New Eng. J. Med., 217:696, 1937.

WOOLLEY, L. F.: The Clinical Effects of Benzedrine Sulphate in Mental Patients with Retarded Activity—Psych. Quart., 12:66, 1938.

## GASTRO-INTESTINAL EFFECTS

MYERSON, A. and RITVO, M.: Benzedrine Sulfate and Its Value in Spasm of the Gastro-Intestinal Tract—J.A.M.A., 107:24, 1936.

## MISCELLANEOUS

REIFENSTEIN, E. C., JR. and DAVIDOFF, E.: The Treatment of Alcoholic Psychoses with Benzedrine Sulfate—J.A.M.A., 110:1811, 1938.

## POST-ENCEPHALITIC PARKINSONISM

DAVIS, P. L. and STEWART, W. B.: The Use of Benzedrine Sulfate in Post-Encephalitic Parkinsonism—J.A.M.A., 110:1890, 1938.

HILL, J.: Benzedrine in Seasickness—Brit. Med. Jour., ii:1109, 1937.

LESSES, M. F. and MYERSON, A.: Human Autonomic Pharmacology. XVI. Benzedrine Sulfate as an Aid in the Treatment of Obesity—New Eng. J. Med., 218:119, 1938.

## DEPRESSION

WILBUR, D. L.; MACLEAN, A. R. and ALLEN, E. V.: Clinical Observations on the Effect of Benzedrine Sulphate—J.A.M.A., 109:549, 1937.

Present Status of Benzedrine Sulfate — Report of the Council on Pharmacy and Chemistry — J.A.M.A., 109:2064, 1937.

Each 'Benzedrine Sulfate Tablet' contains amphetamine sulfate, 10 mg. (approximately 1/6 gr.)

The Council on Pharmacy and Chemistry of the A.M.A. has adopted amphetamine as the descriptive name for  $\alpha$ -methylphenethylamine, the substance formerly known as benzyl methyl carbinamine. 'Benzedrine' is S.K.F.'s trademark for their brand of amphetamine.

SMITH, KLINE & FRENCH LABORATORIES, PHILADELPHIA, PA.

EST.  1841



Hours of the meetings are from 5.00 p.m. to 7:00 p.m. and 8:00 p.m. to 10:00 p.m.

The plan of the course is that correlated lectures on obstetrics and pediatrics will be presented at each of the above towns on the days indicated. Members should attend one afternoon and one evening meeting each week for four consecutive weeks in order to hear the entire course. It should also be remembered by physicians residing in borderline counties that if they miss a lecture in one town they may hear the same lecture at another town the following afternoon or night.

The speakers who will appear on the program are Dr. M. Edward Davis and Dr. Wm. J. Dieckmann, from the Department of Obstetrics and Gynecology of the University of Chicago; and Dr. Rollin E. Cutts and Dr. John M. Adams, from the Department of Pediatrics at the University of Minnesota, each serving two weeks.

The physicians in Norton, Thomas, Finney, Seward, and Ford Counties will act as hosts for the meetings.

### BLIND PROGRAM

Dr. C. J. Mullen, State Ophthalmologist, has recently released the following report of the Division for the Blind of the State Board of Social Welfare of Kansas:

Progress Report for October, 1938 to November, 1938.  
No. of Eye Reports into office during October, 1938.....58  
No. of cases approved as eligible for Aid to the Blind.....38  
No. of cases declared not eligible for Aid to the Blind.....14  
No. of cases pending ..... 6

#### Restoration Of Sight Program

No. of cases approved as eligible for treatment during Oct. ....27  
No. of cases authorized for treatment during Oct.....20  
No. of cases under treatment through Oct. ....96  
No. of cases treatment completed during Oct. ....13  
2 cases completed still eligible for Aid to the Blind.  
11 cases completed with treatment, not eligible for Aid to Blind.  
Total No. of cases treatment completed up to date.....41  
30 cases completed with treatment, not eligible for Aid to the Blind.  
12 cases completed still eligible for Aid to the Blind.  
96 cases under treatment.  
No. of cases eligible for treatment but have not accepted treatment .....229  
Total cost of completed cases during October.....1,139.80  
Hospital cost .....35.55%  
Optical cost .....8.45%  
Doctor's cost .....55.18%  
Medicine's cost .....82%

### COMMITTEE MEETINGS

The following are the minutes of the committee meetings held recently:

A meeting of the Committee on Public Health and Education was held in Kansas City, Missouri, on October 25. Members present were Dr. N. P. Sherwood, Chairman; Dr. Maurice Snyder and Dr. Earl Mills. Dr. A. W. Fegty was also present, and Clarence G. Munns was present as Executive Secretary.

The first item of discussion was the advisability of issuing a bulletin to the county medical societies containing suggestions for lay educational programs. Dr. Mills was

asked to prepare a bulletin of this kind.

Discussion followed concerning the Saline County Medical Society plan of public health advertisements in newspapers. Dr. Snyder was asked to prepare an article describing this plan for publication in the Journal.

The possibility of publishing a lay educational pamphlet on public health was tabled until the next meeting.

The possibility of the Society instituting newspaper and radio releases was also tabled until the next meeting.

Decision was made that a project assigned to the committee wherein announcement would be forwarded to various state groups offering speakers on public health topics should not be attempted this year.

Approval was given that a joint meeting of the committee with representatives of the Kansas State Board of Education and the Kansas State Teachers Association should be arranged within the near future to discuss public health programs in Kansas schools.

Possibility of issuing a pamphlet on public health to physicians was tabled until the next meeting.

Dr. Snyder was asked to investigate and to report to the committee on matters pertaining to Kansas public health officers.

Discussion of Kansas milk ordinances was tabled until the next meeting with the understanding that Professor E. L. Treece and Professor Leon Bowman would be asked to discuss this subject at an early meeting of the committee.

Adjournment followed.

The meeting of the Committee on Control of Cancer was held in Kansas City, Kansas on October 25. Members present were Dr. C. C. Nesselrode, Chairman; Dr. James S. Hibbard, Dr. A. W. Fegty and Dr. C. D. Blake. Clarence G. Munns was present as Executive Secretary.

The recent post graduate course on cancer was discussed. Decision was made that a similar course of six meetings should be presented during next March or April, and that Dr. Nathan A. Womack of St. Louis should be invited to present the course. Further decision was made that the meetings of the course should be held on the afternoons and evenings of Monday, Tuesday, Wednesday, Thursday and Friday and on the morning of Saturday of the week selected; that an offer shall be made to the presidents of the University of Wichita, Hays State Teacher's College, Kansas State College and Emporia State Teachers College for Dr. Womack to present convocation talks at those schools if such is desired; that arrangements shall be effected to present approximately one hour of discussion of clinical cases at each professional meeting of the course; and that if possible the meeting at Wichita shall be made to coincide with the Spring Clinics of Sedgwick County Medical Society.

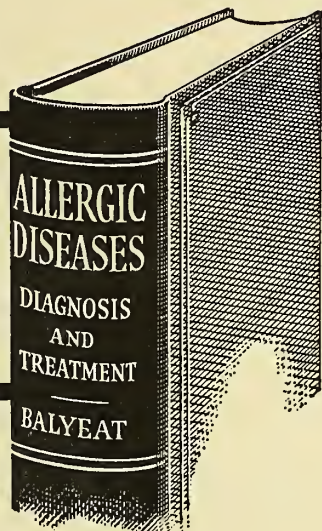
Plans for publication of the cancer brochure by the Committee were also discussed. The central office was asked to investigate possibilities for publishing this during next March and also that Dr. Womack's lectures for the recent course will be included in the brochure.

The central office was instructed to prepare and issue a questionnaire to the county medical societies to determine the extent and adequacy of cancer therapy facilities in Kansas.

Approval was given that the committee shall issue a bulletin to the county medical societies emphasizing the need for extensive lay education on the subject of cancer.

The Central office was asked to forward Dr. Blake and Dr. Hibbard copies of the present committee's loan

*Just Off Press* — **NEW (5th) EDITION**



*Everyday Applications*  
FOR THE  
**GENERAL PRACTITIONER**

ASTHMA  
SEASONAL HAY FEVER  
PERENNIAL HAY FEVER  
PREVENTIVE MEASURES  
MIGRAINE  
URTICARIA  
ECZEMA  
CONTACT DERMATITIS  
GASTRO-INTESTINAL  
ALLERGY  
ALLERGIC CHILDREN  
FACIAL AND DENTAL  
DEFORMITIES  
CONJUNCTIVITIS

**550 Pages, 6 x 9**  
Illustrated with 145 engravings, line drawings and charts, and 8 colored plates.  
**CLOTH, \$6.00 NET**

# BALYEAT'S ALLERGIC DISEASES

## *Their DIAGNOSIS and TREATMENT*

The many new developments in the field of Allergy are explained and *applied* in this *New (5th) Edition* of Dr. Balyeat's book.

Among the new features are the important advances on the treatment of Hay Fever and Asthma; the use and value of the Leucopenic Index test; an entirely rewritten chapter on the Intratracheal Use of Iodized Oil in the Treatment of Chronic Asthma and Bronchiectasis; Allergy as a cause of Detached Retina, Uretero-Spasm and Hydrarthrosis.

By

**RAY M. BALYEAT, M.D., F.A.C.P.**

Associate Professor of Medicine and Lecturer on Diseases Due to Allergy  
University of Oklahoma Medical School  
Chief of the Allergy Clinic, University Hospital  
President of the Association for the Study of Allergy, 1930-1931  
Director, Balyeat Hay Fever and Asthma Clinic

Assisted by **RALPH BOWEN, M.D., F.A.A.P.**

Chief of Pediatric Section, Balyeat Hay Fever and Asthma Clinic  
Oklahoma City, Oklahoma

Dr. Balyeat's achievements in the field of Allergy are world renowned. His book furnishes the general practitioner with a working guide which stresses the fundamentals of Allergy, simplifies tests, and guides you clearly on *every form of treatment*. Here you have TODAY'S knowledge of Allergy — ready for *application*!

**F. A. DAVIS COMPANY, Medical Publishers**  
**1914 Cherry Street, Phila., Pa.**

SEND at once a copy of the New (5th) Edition of Dr. Balyeat's book, "ALLERGIC DISEASES, THEIR DIAGNOSIS AND TREATMENT." Price, \$6.00.

Name.....

Address.....



packet on cancer in order that review and revision may be made of the content of this material.

The central office was asked to issue a questionnaire to the county medical societies to determine the number and kind of cancer quacks in Kansas.

Approval was given that a bulletin shall be forwarded to the county medical societies suggesting that the officers of those organizations provide all possible assistance to the Kansas Women's Field Army.

The possibility of publishing a brochure on Kansas quackery was tabled until a later meeting.

Decision was made that Dr. Nesselrode and Dr. Miller shall confer with the Kansas State Board of Health about present problems pertaining to the reporting of cancer morbidity and mortality in Kansas.

The central office was asked to obtain and to forward to Dr. Nesselrode all possible information about the National Cancer Program.

Adjournment followed.

A meeting of the Committee on Maternal and Child Welfare was held in Emporia, on October 30, and a meeting of the Committee on Allied Groups in Wichita, on November 6. Minutes of these meetings will be printed in the next issue of the Journal. A meeting of the Committee on Medical Economics was held in November and the minutes of this meeting will also be printed in the next issue of the Journal. A meeting of the Committee on Control of Tuberculosis is to be held in Topeka within the next several weeks.

### VENEREAL DISEASE BROCHURE

The Kansas State Board of Health has recently issued a brochure on venereal disease, written by Dr. Arthur D. Gray, Topeka, Chairman of the Society Committee on Venereal Disease. The brochure is largely made up of lectures Dr. Gray presented at a postgraduate course on that subject.

The brochure consists mainly of information on the subject of diagnosis and treatment of syphilis and gonorrhea. Copies will be forwarded by the Kansas State Board of Health to each member of the Society.

### MEDICAL RESEARCH

The new Squibb Institute for Medical Research at New Brunswick, New Jersey, was dedicated on October 11 in the presence of a distinguished gathering of scientists. The dedicatory exercises were held in the gymnasium of Rutgers University, and were attended by more than 2,000 persons.

An address of welcome was delivered by Carleton H. Palmer, president of E. R. Squibb & Sons, founders of the Institute. Mr. Palmer pointed out that the Institute "stands separate and distinct from the business activities of Squibb, replacing none of our manufacturing research, which goes on as before."

In an address on "Yesterday and Today," Theodore Weicker, chairman of the board of the company, formally dedicated the Institute to scientific medicine. "May it succeed in discovering new therapeutic agents for the prevention or cure of disease, or the relief of human suffering," Mr. Weicker declared.

Dr. John F. Anderson, vice-president and director of

the Squibb Biological Laboratories, spoke on "The Squibb Institute for Medical Research." He traced the development of research by the House of Squibb since it was founded by Dr. Edward R. Squibb in 1858, concluding: "Our principal desire is to create a new source from which will flow scientific studies of unquestionable value without any reference whatsoever to their immediate practical application. It is our hope that the work to be undertaken and carried to completion in the Institute will help to push back a little bit further the curtain of the unknown, and ultimately add to the total of human happiness."

Dr. George A. Harrop, director of the Institute, introduced the guest speakers, who, with their topics, were:

Dr. George R. Minot, director, Thorndike Memorial Laboratory, Boston City Hospital, and professor of medicine, Harvard University, "Clinical Investigation."

Dr. Russell M. Wilder, professor of medicine, Mayo Foundation, Rochester, Minn., "Industrial Laboratories and Clinical Research."

Dr. Abraham Flexner, director, The Institute for Advanced Study, Princeton, N. J., "The Usefulness of Useless Knowledge."

Professor August Krogh, professor of animal physiology, University of Copenhagen, Copenhagen, Denmark, "Biology and Medicine in Cooperation."

The closing event of the dedication ceremony, which was preceded by a reception and luncheon, was the conferring of the honorary degree of doctor of science by Rutgers University upon Dr. Krogh. In awarding the degree, Dr. Robert Clarkson Clothier, president of Rutgers, cited Professor Krogh as follows:

"Dr. Krogh, your long and distinguished pursuit of truth among the mysteries of life has lighted dark places in the borderland of human knowledge. You have exerted a profound influence upon the endeavors of your fellow physiologists. Your researches have enriched our scientific heritage. With the approval of the Trustees of Rutgers University, it is my privilege to confer upon you, *honoris causa*, the degree of doctor of science."

Following the dedication, 3,000 persons inspected the new \$750,000 laboratory occupied by the Institute. In this laboratory a staff of scientists assembled from leading institutions in the United States and foreign countries will carry on researches in pure science, attacking problems related to the cure of disease and the relief of pain.

### MEMBERS

Dr. Severt Anderson, formerly of Morganville, has opened an office in Clay Center.

Dr. A. C. Eitzen, Hillsboro, Dr. O. W. Miner, Garden City, and Dr. B. A. Nelson, Manhattan, were made members of the American College of Surgeons at the recent meeting of that organization in New York City.

Dr. E. M. Seydell, Wichita, was installed as first vice-president of the American Academy of Ophthalmology and Otolaryngology in Washington, D. C., at the October 9 meeting of that society.

Dr. C. C. Tucker, Wichita, has been asked to open the discussion of Dr. Dudley Smith's paper on "The Management of Complex Fistula-in-Ano" at the Southern Medical Association Meeting, November 15-18. Dr. Tucker and Dr. C. A. Hellwig will have their exhibit "Proctologic Tumors; Diagnostic Difficulties and Pathology" in the exhibit section at the meeting.

# RADIUM

## —FOR RENT

for the individual case, at the basic rate of \$14.00 for the use of 50 milligrams for 30 hours or less. Special delivery Express Service.

## —FOR LEASE

in any quantity of 50 milligrams or more, on a yearly basis. Rate is \$22.50 per month for 50 milligrams, including insurance and upkeep.

## —FOR PURCHASE

in any quantity, at the lowest price in history.

RADON IN ALL-GOLD IMPLANTS AT \$2.50 PER MILLICURIE

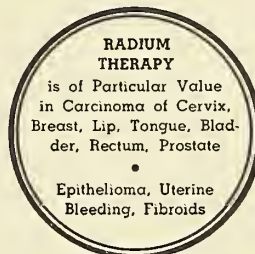
*The complete service for Radium users*

For details, address

**RADIUM AND RADON CORPORATION**

Marshall Field Annex • Phone Randolph 8855 • 25 E. Washington St.

CHICAGO



## PROFESSIONAL PROTECTION



### A DOCTOR SAYS:

"It was 'a grand and glorious feeling' to have the protection of the Medical Protective Company. My earnest prayer is that in the future I will be an asset to your very fine Company."

THE

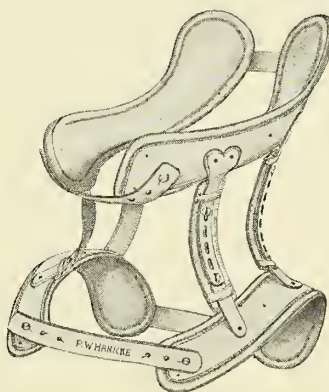
**MEDICAL PROTECTIVE COMPANY**

OF FORT WAYNE, INDIANA

WHEATON, ILLINOIS

## Apparatus for Fracture of Cervical Vertebrae

(Our Design)



**P. W. HANICKE MFG. CO.**

1013 McGee Street  
KANSAS CITY, MO.

Tel. Victor 4750



## PAMPHLET

Certain members of the Kansas osteopathic profession are circulating the following information in pamphlets and in paid newspaper advertising:

U. S. Employees' Compensation Act to read "The term 'physician', includes surgeons and osteopathic practitioners . . . the term 'medical, surgical and hospital services and supplies,' includes services and supplies by osteopathic

"COMPARATIVE CURRICULUM of ALLOPATHIC (M.D.) and OSTEOPATHIC (D.O.) MEDICAL COLLEGES

Required course of study in hours.

While there is some variation in the arrangement of subjects in each college all minor subjects are classified under the general subject to which each is most closely related, and no subject is omitted in the totals.

Subject	Required course for D.O. degree in Osteopathic Colleges			Required course for M.D. degree in Allopathic Colleges		
	Kansas City College of Osteopathy & Surgery (1)	Los Angeles College of Osteo. Phys. & Surgeons (2)	Kirksville College of Osteo. & Surgery (3)	Kansas University School of Medicine (4)	Northwestern University School of Medicine (5)	Johns Hop- kins Uni- versity School of Medicine (6)
Anatomy	846	709	918	768	631	556
Chemistry	486	214	378	224	209	256
Hygiene and Preventive Medicine	54	181	90	80	22	16
Therapeutics (Treatment)	1,422	1,549	1,512	1,256	1,516	1,520
Medical Juris- prudence and Ethics	12		18	33	11	
Obstetrics and Gynecology	288	445	342	269	249	136
Pathology and Bacteriology	414	486	486	614	449	576
Supplemental Therapy In- cluding Phar- macology, etc.	90	210	90	193	137	64
Physiology	288	237	378	320	312	200
Surgery (7)	702	920	576	727	652	503
Totals	4,602	4,951	4,770	4,484	4,188	3,827

"The above outlined courses of study for M.D., or Doctor of Medicine, requires four years of eight months each, according to the Journal of the American Medical Association, August 27, 1938. This requirement is also made by the Kansas Medical Board to obtain a license to practice in Kansas.

The above course requires four years of nine months each to obtain the degree of D.O., or Doctor of Osteopathic Medicine and Surgery, and is the requirement made by the Kansas Osteopathic Board to obtain a license to practice in Kansas.

Neither the Medical Board or the Osteopathic Board of Kansas requires an internship, although large numbers of the osteopathic physicians and the so-called medical physicians take one year of internship before the practice is commenced.

The laws of Kansas require that every osteopathic physician spend two days of each year in post-graduate work in osteopathic medicine and surgery in order to renew his license to practice.

The law passed by The Congress of The United States to regulate the practice of Osteopathy in the District of Columbia says "The degrees, doctor of medicine and doctor of osteopathy, shall be accorded the same right and privileges under governmental regulations."

Just recently The Congress of The United States again spoke and unanimously approved a bill amending the

practitioners and hospitals . . ."

1. Catalog of College—1938-1939—page 30.
2. Catalog of College—June, 1938.
3. Annual Catalog of College 1938-1939, page 21, 22.
4. Bulletin, K. U. School of Medicine, Catalog issue—1936-1937 and 1937-1938, pages 28-30.
5. Announcement Medical School, 1937-1938, pages 25-26.
6. University Circular, School of Medicine, Catalog Number, 1937-1938, pages 124-127.
7. Including, general surgery, orthopedics, urology, proctology, fractures, bandaging, dentistry, emergency practice, etc., making total hours for surgery in each college on same basis.

The Kansas Medical Society has attacked the right of the osteopathic physicians and surgeons to practice in Kansas as taught and as they have practiced in Kansas for more than 25 years.

The osteopathic physicians and surgeons of Kansas have either four or five years college and university training in anatomy, chemistry, hygiene and preventive medicine, therapeutics (treatments of several kinds), obstetrics, bacteriology, therapy and pharmacology, physiology, and operative surgery.

Compared to the so-called medical physician and surgeon, the osteopathic physician and surgeon has more training in



☆☆☆

# Common Sense Prescribes

☆☆☆

**DR. WHYNOT YOU** SUITE 234-6  
TEL. 1234 PROFESSIONAL BUILDING

R FOR: *Mrs. Everywoman*  
ADDRESS: *Anywhere*

*For a healthy interest  
in looking lovely -  
Our Individualized  
Beauty Service by  
Luzier's - Miss with  
common sense and use  
regularly.*

**LUZIER'S, INC., MAKERS OF FINE COSMETICS**

KANSAS CITY, MO.



medical school than the M.D., or medical physician and surgeon.

Three standard, Class A, medical colleges—the University of Kansas, Northwestern University of Chicago, Illinois, and Johns Hopkins University—according to their published catalogs, require an average of 4166 hours of college or university training, as compared to 4774 hours of college or university training required by the three approved or standard, Class A, osteopathic colleges of medicine—the Kansas City College of Osteopathy and Surgery, the Los Angeles College of Osteopathic Physicians and Surgeons, and the Kirksville College of Osteopathy and Surgery.

In other words, most of the osteopathic physicians or surgeons of Kansas do an average of 608 college or university hours work more than the average medical physician and surgeon; 608 hours college work is a little more than one-half year's work in medical schools.

Most of the Class A osteopathic colleges of medicine require two years pre-college credits at this time. After 1939, all of the osteopathic colleges of medicine will require two years pre-college credit. That will mean that all osteopathic physicians and surgeons will have the same foundational education and a better training in the studies of medicine and of the human body than those who practice as medical physicians and surgeons, or M.D.s.

Most of the so-called medical schools are supported all or in part by tax money paid by all of the people. The osteopathic colleges of medicine are supported by the tuition paid by the students who attend these colleges."

#### DR. JOHN R. BRINKLEY

The Kansas medical profession will be interested in the following news item taken from the *Liverpool Advance* of England published on August 4, 1938:

##### "DR. BRINKLEY RETURNS TO LIVERPOOL; HAS FINE YACHT

Welcomed by the blare of waterfront whistles and sirens, the palatial steam yacht Doctor Brinkley proudly nosed her way up Liverpool harbor to her berth at the Irving Oil dock on Tuesday afternoon. There is no man in America more welcome in Liverpool than the owner, Dr. J. D. Brinkley.

On board were Dr. and Mrs. J. D. Brinkley, son John of Del Rio, Texas; Mr. and Mrs. H. D. Munal of San Juan and Mr. and Mrs. J. R. Hensley of San Juan.

Dr. Brinkley is well known in Liverpool where he last visited in 1936 in another yacht the Doctor Brinkley II, which he since disposed of to the premier of Venezuela.

The present yacht, considerably larger than the Doctor Brinkley II was formerly the *Caroline*, owned by John Schenck, the movie magnate. It was on the *Caroline* that Douglas Fairbanks and Lady Ashley spent their honeymoon.

The Doctor Brinkley is 172 feet long, 27 feet beam and 13 feet draft and carries a crew of 24, and is listed 100 A1 in Lloyd's register of shipping.

The craft has covered about 10,000 miles since last May and has cruised about Pacific and southern waters on a fishing expedition. Fog and rain have been encountered at all stages of the journey.

Dr. Brinkley and his party on Wednesday morning left by motor for Halifax while the yacht will follow them going to Louisburg for a few days sword fishing, returning to Liverpool about August 10. Dr. Brinkley intends to fish for giant tuna as he so successfully did two years ago, and may remain here for many weeks.

Capt. Herman Gray, formerly employed by the Nova

Scotia government as a Tuna expert, is aboard the Doctor Brinkley as a fishing guide.

Dr. Brinkley, who formerly conducted a large clinic in Del Rio, Texas, has removed his hospitals to Little Rock, Arkansas.

Thrice welcome Dr. and Mrs. Brinkley—you are more welcome than the flowers in May."

#### LOCATIONS

Information has been received by the central office that good locations are available in the following towns: Westphalia, Selden, Riley, Johnson and Sawyer.

#### DEATH NOTICES

Dr. Warren Buckland Beach, 65 years of age, died at his home in Delphos on October 12, 1938. Dr. Beach was born at Wrights Corners, New York in 1873 and received his grade school and high school education in Lockport, New York. He began his study of medicine at the University of Buffalo and received his medical degree from the Kansas Medical College at Topeka in 1900. He began his practice at Clyde, Kansas, and during the World War served on the Selective Service Board. Dr. Beach moved to Delphos in 1921 and continued his practice until the time of his death, completing thirty-eight years in medicine. He was a member of the Cloud County Medical Society.

Dr. Willard W. Nye, 92 years of age, died at his home in Hiawatha on October 19, 1938. He was born in Bangor, Maine, in 1846, received his early education at the Knox Academy in Galesburg, Illinois, and left school to enter the army. Dr. Nye was taken prisoner in the Battle of Lexington and was paroled in September of the same year. He received his degree in medicine from the Jefferson Medical College in 1877 and located in Hiawatha in the same year. Dr. Nye was an honorary member of the Brown County Medical Society.

Dr. John Harvey Saylor, 72 years of age, died at Christ's Hospital in Topeka on October 17. Dr. Saylor was a resident of Marion. He was born in Waterloo, Iowa, in 1866, and received his college degree from the McPherson College. He attended the Kansas City Medical College and graduated in 1904, moving to Ramona, Kansas, where he practiced medicine until 1925. He then moved to Marion and remained there until the time of his death. Dr. Saylor was a charter member of the Marion County Medical Society and had practiced in Marion County for thirty-four years, the last thirteen of which he served as county health officer.

Dr. George Sylvester Smith, 83 years of age, died at his home in Liberal on October 24. He was born in Tyler County, West Virginia, in 1855, and attended the grade and high schools there. Dr. Smith attended the College for Physicians and Surgeons at Baltimore, Maryland, and was later graduated from the Kansas City Medical College in 1891. He was a member of the Meade-Seward County Medical Society.

Dr. Edwin Anderson Tufts, 58 years of age, died in Mercy Hospital in Arkansas City on October 4, 1938. He was born in Centralia, Illinois, in 1880 and attended high school in Belleville, Illinois. He received his medical education in the National University of Arts and Science, Medical Department, St. Louis, Missouri, and graduated in 1915. Dr. Tufts specialized in obstetrics. Following his graduation from medical school he began his practice in Arkansas City and remained there until the time of his

# THE Lattimore Laboratories

TOPEKA, KANSAS

J. L. Lattimore, M. D. Director

A. C. Keith, B. S. Chemist

Allen Gold, M.A., M.T.

H. C. Ebendorf, M. T.

**We invite consultation about the case that needs pathological service.**

**Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00**

*Containers furnished upon request.*

## OFFICES:

Topeka, Kansas

El Dorado, Kansas

Sedalia, Mo.

McAlester, Okla.

# Grandview Sanitarium

KANSAS CITY, KANSAS. (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of super accommodations for the care of:

NERVOUS DISEASES

MILD PSYCHOSES

THE DRUG HABIT

AND INEBRIETY.

Situated on a 20-acre tract adjoining City Park of 100 acres. Room with private bath can be provided.

The City Park line of the Metropolitan Railway passes within one block of the Sanitarium. Management strictly ethical.

Telephone: Drexel 0019

SEND FOR BOOKLET

**E. F. DeVILBISS, M.D., SUPT.**

OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.



death, having completed twenty-two years in the practice of medicine. He was a member of the Cowley County Medical Society.

### COUNTY SOCIETIES

The Bourbon County Medical Society held a meeting in Fort Scott on October 24 with Dr. Carl R. Ferris and Dr. Claude J. Hunt of Kansas City, Missouri, as guest speakers. Dr. Ferris spoke on "Recent Advances Made in the Treatment of Diabetes" and Dr. Hunt on "Problems in Thyroid Disease".

Members of the Butler-Greenwood County Medical Society met in El Dorado on October 14 for their regular monthly meeting. Dr. Ray West, Wichita, spoke on "Cervical Prophylaxis as a Measure in Reducing Carcinoma" and Dr. Fred McEwen, Wichita, spoke on "Electrocardiography".

The Clay County Medical Society held a meeting in Clay Center on September 14, with Dr. Damon Walthall, Kansas City, Missouri, as the guest speaker. His subject was "Some Later Developments in the Treatment of Pneumonia and Other Infectious and Contagious Diseases of Children".

Dr. F. L. Menahan, Wichita, was the principal speaker on the program of the Cowley County Medical Society meeting in Arkansas City on October 20. His subject was "Present Status of Preventive Pediatrics".

Members of the Harvey County Medical Society held a dinner meeting in Newton on September 5. Dr. E. M. Harms, Newton, spoke on "Surgical Extrophia", and Dr. A. S. Hawkey, Newton, gave a paper on "Obstetrical Experiences."

Labette County Medical Society held their first fall meeting in Parsons on September 28. Guest speakers were Dr. J. L. Lattimore, Topeka, and Dr. E. C. Duncan, Fredonia.

A meeting of the Johnson County Medical Society was held in Olathe on October 10. Guest speakers and their subjects were: Dr. W. C. Bartlett, Wichita, on "Surgical Gall-Bladder", and Dr. J. S. Hibbard, Wichita, on "Surgical Treatment of Ulcerous Lesions of the Stomach".

The Marion County Medical Society met in Marion on October 25 as hosts to the members of the McPherson and Harvey County Medical Societies. Dr. C. A. Hellwig, Wichita, spoke on "An Analysis of the Causes of Uterine Bleeding After the Age of Forty Years", and Dr. Philip W. Morgan, Emporia, discussed "Electrocardiography and the Evaluation of Heart Symptoms".

The Marshall County Medical Society held their regular monthly dinner meeting in Marysville on September 15. Miss Nina Hansen, relief commissioner of Marshall County was the speaker on the program.

Dr. Fred J. McEwen, Wichita, was the guest speaker on the program of the Mitchell County Medical Society meeting on October 12.

The Montgomery County Medical Society held a meeting in Independence on October 28.

Dr. G. W. Hammel, Hoxie, was elected president of the Northwest Kansas Medical Society, at a meeting of that organization at Colby on September 21. Other officers

elected to serve during the year are: Dr. W. A. Grosjean, Colby, 1st vice president; Dr. A. E. Cooper, Logan, 2nd vice president; Dr. D. D. Vermillion, Goodland, secretary-treasurer. Dr. Joseph Walker of the University of Kansas Medical School of Medicine, presented two papers. The first on "Blood Dyscrasias" and the second on "Cardiac Conditions".

Members of the Pawnee County Medical Society held a meeting in Larned on September 5. Dr. T. L. Foster, Larned, read a paper on "New Treatments of Insanity".

A dinner meeting of the Pratt County Medical Society was held in Pratt on October 28. Dr. C. A. Hellwig and Dr. H. C. Clark, both of Wichita, gave the principal addresses of the evening.

Reno County Medical Society met in Hutchinson on September 31. Dr. Henry N. Tihen, Wichita, gave a paper on "Presentation of Gastro-Intestinal Cases" and Dr. J. V. Van Cleve, also of Wichita, spoke on "Syphilis".

Dr. Summer L. Koch, Associate Professor of Surgery at Northwestern University Medical School, Chicago, Illinois, was the guest speaker on the program of the Shawnee County Medical Society meeting on October 3. His subject was "Some Surgical Principles in the Care of Injuries and Infections of the Hand".

The Southwest Kansas Medical Society held a meeting in Chanute on September 24.

The Sumner County Medical Society held a dinner meeting in Wellington on September 15, with Dr. J. Allen Howell and Dr. Lloyd Sarchet both of Wellington as the speakers on the program.

Dr. F. P. Helm, Secretary, Kansas State Board of Health, presented a movie on "Syphilis" to the members of the Washington County Medical Society at a meeting in Washington, on October 11.

The Wyandotte County Medical Society met in Kansas City on September 20. Dr. J. A. Fulton and Dr. M. J. Rumold, both of Kansas City presented scientific papers.

Dr. W. Walter Wasson, Denver, Colorado, was the guest speaker on the program of the Wyandotte County Medical Society held in Kansas City on November 15. His subject was "The Anatomy, Physiology and Mechanics of the Chest as a Basis for the Study of Chest Diseases and Their Classification."

### BOOK REVIEWS

The Kansas medical profession may take pride in the numerous and favorable comments which have been made about Dr. Arthur Hertzler's new book entitled, "The Horse and Buggy Doctor". The book was selected as the August choice for the Book-of-the-Month-Club and favorable reviews have appeared in most of the best known publications throughout the United States. The review which appeared in the August 6 issue of The Kansas City Star is a particularly able description and appraisal and the Journal takes pleasure in reproducing it below for the information of all members:

"THE HORSE AND BUGGY DOCTOR, by Arthur E. Hertzler, M. D. (322 pages, Harper & Brothers, New York) The life of a famous Kansas surgeon.

If all doctors of the horse-and-buggy days had been as

**PLEASE  
ASK  
US . . . . .**

**YOU MAY** have questions . . . on the physiological effects of smoking . . . which we can answer. Please feel free to ask us.

Our research files contain exhaustive data from authoritative sources—from which we will be glad to quote whatever may bear upon your question.

If you have not already read the studies on the relative effects of cigarette smoke, may we suggest that you use the request blank below? And also that you try Philip Morris Cigarettes yourself.

IF YOU WOULD LIKE COPIES of reprints listed below, check those you wish, tear off this part of the page, and mail to PHILIP MORRIS & CO., LTD., INC., 119 Fifth Avenue, New York...Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐ N. Y. State Jour. Med., 1935, 35-No. 11, 590 ☐ Laryngoscope, 1935, XLV, 149-154 ☐ Laryngoscope 1937, XLVII, 58-60 ☐

NAME \_\_\_\_\_ M. D.

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

KAN.



articulate as Doc Hertzler is in this book, the dime novel and the philosophical tome—both literary extremes—would have had fewer readers. The people would have been reading their doctors instead.

"I had to sacrifice my better judgment," the doctor says in his preface, "in telling the story as an individual." Then here's hoping doctors in the future will throw caution to the winds, or else revise their ideas of better judgment. Many a pillswallowing patient will feel sure it wasn't his better judgment the lank M. D. of Kansas City and Halstead, Kas., was sacrificing when he produced this volume.

As a boy Arthur E. Hertzler was gangling and underfed. A bully twice his weight gave him a brain concussion, and a strapping school teacher licked him with a stick. Arthur from then on resolved that when cuffed, he would cuff back. He threw a slate at the teacher the next time a licking threatened. He learned to shoot a pistol and rifle, not only for hunting rabbits but for a reserve as self-protection against bullies. He became a sharpshooter with all sorts of guns. In his country practice he shot at fierce dogs that charged him on the road or entering farmyards. He sometimes used a shotgun and he "gave 'em both barrels."

Some thirty technical volumes on surgery and medical treatment, Dr. Hertzler has written cautiously. But in the book he has written "as an individual" he decided to speak out about a rough and ready medical career. He "gave 'em both barrels." The publishers printed it all. The reader-patient will like it.

#### Human Side Of Medicine

The Hertzler mood in this book, we suspect, is really typical of the writer's personality. He is a professional man looking at patients as persons, as emotional uncertainties as well as laboratory subjects. He is looking at his own profession in the same way. Honesty and understanding result.

A sharp curiosity and considerable fortitude led young Hertzler into the practice of medicine. His appearance was against him and he had no financial backing. Hints at his struggle through medical school are significant. He gained a practice through stubborn thoroughness that caused the farmer folk to say: "That young feller don't quit until he's tried everything, and then he keeps on."

His book begins with grim examples of medical ignorance of fifty years ago, of the pitiful deaths of children and whole families from contagious diseases that laboratory and bedside research since have found means of preventing. The victims were Kansas people.

We see Hertzler coming to understand at first hand the essential quest of medicine, to help people live out their normal lives, to subdue pain, to fight off death as long as possible, to whip ignorance with knowledge, first hand.

With his first savings as a country doctor Arthur Hertzler went to Berlin and studied pathology. He became a research technician as well as a surgeon. The chapters reel off examples of flesh-and-blood cases, where one doctor learned through bedside practice and followed it up with microscopic practice. Child birth, appendicitis, surgery in farm kitchens, under apple trees, at the town office—the education of a doctor never ends.

#### Record Of A Fighter

Dr. Hertzler's fight to build a hospital is itself something of an epic, a story of achievement in the face of backbitings, jealousies and traditional ignorance. Hertzler steps behind the drop curtains of professionalism—among doctors, lawyers and clergymen, all of whom frequently have a hand in the business of death. From a scratch start

he built in small Halstead a \$600,000 hospital, one of the best in Kansas.

Just how scientific is medicine? "In a word," says Hertzler, "a doctor learns medicine just as an Indian learns to track, that is by tracking." He gives his ideas on specialists and the general practitioner.

He takes us to the death bed and says one seldom finds fear or pain there.

He believes it is essentially true that some people die of grief. Men, he says, mourn the death of their wives more than women mourn the death of their husbands.

There are emotional factors in disease that all the cold science in the world can't help.

"An old person dies of something and in a short time the mate, although quite sound physically until then, just dies too. Here is something that transcends the laws of biology . . . The most reliable indication that grief lies at the base of the patient's suffering is sleeplessness . . . Nothing in all the range of human complaints excites my sympathy so much as sleeplessness. The eternal night."

The "Horse and Buggy Doctor" is strewn with experiences and observations that tempt the eye through its 322 pages long after the usual bedtime hour. Many a paragraph has a laconic "cracker." Doc Hertzler, a personality at medical gatherings for many years, has his own brand of wit, sharp as the knife he handles so deftly as one of the leading goiter removers and surgical pathologists of the land.

"The science of medicine," he summarizes, "is great, but it is abstract. The relation of doctor and patient is something else. . . . A doctor, an M. D., must think the truth. Perhaps it would be better if he sometimes proclaimed it."

In this book Dr. Hertzler dodges few prickly pears in proclaiming the truth as he has found it in an extraordinary career."—The Kansas City Star, August 6, 1938.

THE ROMANCE OF PROCTOLOGY—by Charles Elton Blanchard, M. D., Publishers Medical Success Press, Youngstown, Ohio. This work is an avowed attempt to record the history of proctology, in which the author praises ambulatory methods of treatment of which he is the leading exponent of today. Dr. Blanchard punctuates his work with frequent references to the injustices of organized medicine as: "having no faculty of discrimination" . . . "must be no departure from established precedent" etc. Much space is given to the development of the present method of injection treatment of hemorrhoids, pioneer work being created by Dr. Milton W. Mitchell upon whose death organized medicine is once more commented upon as: "a heartless medical system was blotting him out". The author fails to mention contra indications, morbidity, mortality and recurrences associated with injection treatment. Fissure, cryptitis, fistula and other common anal conditions are discussed from the ambulatory proctologists point of view. The author still recommends the old method of sphincter divulsion for fissure in ano. What of the chronic fissure with scarring where divulsion would result in tearing and aggravation of the pathology? Etiological factors for hemorrhoids, pruritis ani, fissure in ano etc. are offered—none of which are accepted by regular proctologists. Regular proctologists of our century, such men as Yeomans, Lynch, Buie, Gorsch, Hanes, Hirschman, Tuttle etc. are avoided or given scant attention.

In summary, "The Romance of Proctology" is not a history of proctology but a glowing tribute to ambulatory proctology of which the author is the present leader. The authors dislike of organized medicine and recognition of

# RECENT ADVANCES IN THE SCIENCE OF NUTRITION

## III. Some Attainments in the Fields of Vitamin A Research

● During the twenty-five years since its discovery, vitamin A has been the subject of much intensive research, first by the biochemist and physiologist, and later by the clinician and organic chemist. It may be of interest to describe briefly several of the achievements made in these various fields of research on vitamin A.

It has been found that vitamin A is unique among the vitamins thus far discovered. It is apparently the only vitamin produced solely by animal metabolism from precursors—certain carotenoid pigments—which are themselves solely the products of plant metabolism. The structure of the vitamin has been established and checked by syntheses of closely allied forms and probably of the pure vitamin itself (1).

Physiological and clinical researches have provided explanations of the mode of absorption of the vitamin and the mechanisms of transport and storage in the body (2). The specific pathological effects of varying degrees of vitamin A deficiency in humans have been extensively studied. Many of the older ideas concerning specific effects of vitamin A on man have been confirmed; some of the older beliefs have been dispelled (2).

Recent years have also brought improvements in assay methods for vitamin A (3). Common American foods have been sur-

veyed and their vitamin A values tabulated (4). Last but not least, authoritative estimates are at hand as to the quantitative requirements of children and adults for vitamin A (5). Such, in brief, are only a few of the important additions which have been made to our knowledge of this essential dietary factor. Today, students of nutrition favor the practice of "protective nutrition" in which the individual is maintained upon a diet calculated to supply all known dietary essentials—vitamin A included—in optimal amounts insofar as these amounts may be known. In specific instances, such dietaries must be supplemented by vitamin-rich materials. However, the prime consideration is to provide a properly formulated basic diet. In this connection, commercially canned foods are worthy of mention.

Modern canning procedures are practically without effect upon the vitamin A values of raw foods (3). The commercially canned varieties of foods prized for their vitamin A contents, therefore, lend themselves admirably to the formulation of protective diets. Not only because of their contributions of vitamin A, but also because of their ready availability, convenience and economy, these commercially canned foods provide one of the most valuable means whereby the American public may secure an optimal supply of the important dietary essential, vitamin A.

## AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

1. 1938. J. A. M. A. 110, 1748.

2. 1938. Ibid. 111, 144.

1938. Ibid. 110, 2072.

3. 1938. Ibid. 111, 245.

4. 1937. U. S. D. A. Bur. of Home Econ., Misc. Pub. 275.

5. 1934-1935. Amer. Pub. Health Assn. Year Book 25, 69.

*We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the forty-second in a series, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



his own worthy contributions to ambulatory proctology are only reasons we find for this book having been written. We like proctology as a medical subject but failed to find romance in this book—we also like nature but have never found "sermons in stones" etc.—L.A.S.

**SYNOPSIS OF DISEASE OF THE HEART AND ARTERIES** by George R. Herrmann, M. D., Ph. D., Galveston, Texas. Published by the C. V. Mosby Co., St. Louis. 1936. 328 pages. Price \$4.00.

This little volume is exactly what the author says: "an attempt to provide an acceptable indexed epitome of the principles and modern conceptions of cardiologic practice". It is a most successful attempt. Simplicity and clarity have been attained.

Heart disease in general is discussed. The history taking and physical examination of the patient suspected of having heart disease receive careful attention. The use of the stethoscope, sphygmomanometer, and oscillogram is described. The values of roentgenologic studies and electrocardiography are discussed conservatively.

Dr. Herrmann gives a classification of heart disease based on the outlines of nomenclature and criteria for diagnosis as approved by the American Heart Association. Etiologic, anatomic, physiologic, and functional diagnosis are used. The various phases and types of heart disease and its treatment follow with a final chapter on peripheral vascular disease. Surprisingly complete surveys are given in very few pages, especially in the short chapters on the mechanisms of heart failure and on heart pain. Ninety-one illustrations and diagrams are well used to assist in visualizing the text.—D.C.W.

**SYNOPSIS OF ANO-RECTAL DISEASE**—Louis J. Hirschman, M.D., F.A.C.S. Publishers, C. V. Mosby Co., St. Louis, Mo. Another of the popular group of synopses by a leader in the field of proctology. The popularity of this work is well demonstrated by the good reception accorded four previous editions. The present edition of Synopsis of Ano-rectal Diseases is enlarged, more profusely illustrated and revised to the times in accepted proctologic procedures. The first four chapters are devoted to anatomy, history taking, examination and anaesthesia with stresses on local anaesthesia in proctologic work. A very valuable chapter is one devoted to limitation in local anaesthesia and office procedures in ano-rectal work. A more lenient view is expressed toward office procedures than in the past. Constipation is thoroughly covered—a chapter which should be instructive to every practitioner. Pruritis ani is given deserved space in this work—multiple etiological factors and various methods of treatment—medical, injection and surgical being presented with indications and limitations for each. The chapter on anal fistulae and sinuses is well illustrated; classification of this common ano-rectal condition together with methods of therapy, their indications and contra-indications are presented. Dr. Hirschman describes his pre-operative method of bismuth paste injection of complicated fistula followed by x-ray plates to determine course of fistula. The two-stage operation for fistula is described in detail. Hemorrhoids are viewed from all angles with sufficient discussion of different methods of therapy. The author does not recommend injection, cautery or the Whitehead operation—stating twenty-five per cent recurrence internal hemorrhoids in one to five years in cases treated with injection, cautery or the electric needle. Other usual and unusual ano-rectal-sigmoidal conditions are treated in this work in the authors usual excellent way. Dr. Hirschman is highly regarded as a

teacher and writer on proctologic subjects in which field he has been a pioneer for many years. This most practical book is one which we feel should be read and re-read by every proctologist, general surgeon and general practitioner.—L.A.S.

**MEN PAST FORTY**, by A. F. Niemoeller. Harvest House, New York, Publishers. 1938.

A book about, and for, men approaching the "male change in life" and largely devoted to the subject which the public likes best: Sex. It includes the usual diagrammatic charts of the male genital apparatus, discusses impotence, ejaculatio praecox, and tells of various sexual cult practices. Aphrodisiacs with the names of their manufacturers are recommended. In like manner the author lists a number of oral endocrine preparations used for rejuvenation including tesifortan, testogan, testrones, fortotest, remogland, yohimbin and orchic compounds, tonicine, testacoids, orchic compounds, etc., etc. While he states that these should be used under the guidance of a physician, he gives the name and address of the manufacturer of each. Surgical rejuvenation and the "change of life in the male" are given with recommendations for Steinach and Voronoff operations. It is doubtful if this volume would assist in the management of the individual for whom it is apparently intended.—D.C.W.

---

## AUXILIARY

---

### PRESIDENT'S MESSAGE

Dear Auxiliary Members:

I am giving you a part of the Plans and Policies for 1938-39 sent me by Mrs. Tomlinson, our National President.

**Organization: Our Goal**—Every state a part of our organization and every wife of every member of the American Medical Association an interested and enthusiastic worker in the Auxiliary. It is the belief of your president that significant increases in membership to the auxiliary will result from increased usefulness of our organization.

**Hygeia:** "The torch that lights the way." Hygeia is the only health magazine of national circulation which acts as an interpreter of scientific medicine to the public. Informed people are amenable to reason. The greater the popularity of Hygeia, the greater will be the number of individuals and groups who will assist in the defense of the private practice of medicine.

**Program:** The first essential to an effective program is the possession of information. To be real emissaries of the profession, we must have an intelligent conception of all problems touching upon the practice of medicine whether they pertain to matters of health or economics. Few realize the time and energy required of our national Program Chairman in compiling and selecting material suitable to individual needs. Her outline, now in your hands, offers valuable suggestions for program building. From these selections, we hope that you may glean constructive thoughts applicable to your particular locality. Through the courtesy of the American Medical Association, there are available pamphlets and charts helpful in stimulating the interest of lay groups in matters of health. You should also look to the American Medical Association for dependable information pertaining to the economic



## EDUCATION

Physicians who teach correct bowel management to their patients will appreciate the value of the new "Habit Time" booklet as a means of impressing patients with the importance of bowel regularity.

"Habit Time," written for doctors' patients in a clear, interesting style, embraces a discussion on diet, exercise and bowel regularity, in addition to a simple explanation of the functions of digestion.

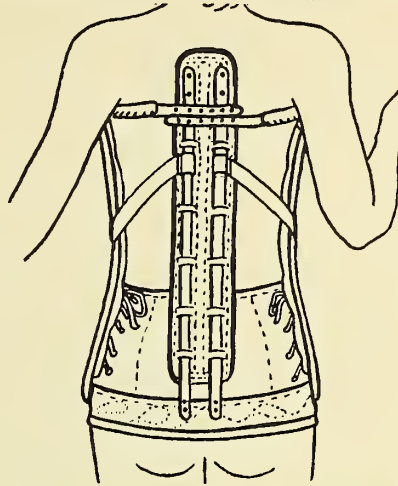
"Habit Time," illustrated by Tom Jones, celebrated anatomical artist, has been reviewed and found satisfactory by the Council on Pharmacy and Chemistry of the American Medical Association. It is offered, free, by Petrolagar as an aid to doctors.

Petrolagar Laboratories, Inc. • Chicago, Ill.

*Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.*



## A COMPLETE SERVICE



We make all types of braces, splints, belts, elastic hose, crutches, arch supports and special apparatus.

If your patients cannot come to us we will come to them. Prices reasonable.

Camp's Supports

**Kansas City Brace & Splint Co.**

Phone Drexel 0640

847 Minnesota Avenue

Kansas City, Kansas

## Ambulance Service

To which you may  
trust your most  
gravely ill patient

•

NEW AMBULANCES  
TWO TRAINED ATTENDANTS

•

*Rates: 15c a mile to any point in Kansas—  
everything included*

WALL-DIFFENDERFER  
MORTUARY

Topeka,  
Kansas.

723 West 6th  
Phone 3-2326



problems of the profession.

**Public Relations:** One of the important functions of the Auxiliary is to help create and maintain contacts between the medical profession and the public. Each member of the Auxiliary should be well informed on problems facing the profession so that she may be in a position to discuss, calmly and intelligently, the various questions which arise in lay organizations.

**Press and Publicity:** News items from your unit are both interesting and stimulating to other units. Communicate them to the State Chairman of Press and Publicity for publication in the Auxiliary section of the Journal of the Kansas Medical Society. The News Letter, issued quarterly by the National Chairman of Press and Publicity, contains valuable information from which suggestions applicable to your particular needs may be obtained. The News Letter will keep you in closer contact with your National Board and otherwise be of benefit. A subscription to it will greatly increase your interest in, and knowledge of, Auxiliary activities.

We are happy to include Barton County at this time. Mrs. H. E. Jury of Claflin is president, and Mrs. Leo Wenke of Great Bend is secretary and treasurer.

August 13, 1938, I attended an informal tea at Salina, and August 14, I made an official visit to Wyandotte County.

Do not be discouraged if, at one time or another, your meetings are not very well attended. If some member can not attend at some special date, she is still an Auxiliary member and is "for" the Auxiliary 100 per cent. I have visions of a very large membership in Kansas. We are doing just what we have always done, but the wives are organized, still organizing, and stand as one behind their husbands.

Mrs. R. T. Nichols, president of Brown County, has reported the death of Mrs. Henry Jackson Deaver of Sabetha. We wish to extend our sincere sympathy to Dr. Deaver and to the Brown County Auxiliary.

Mrs. F. E. Coffey.

Mrs. F. E. Coffey and Mrs. C. D. Blake represented the Central Kansas Auxiliary at the June meeting of the National Auxiliary in San Francisco.

The members of the Central Kansas Auxiliary were entertained at the home of Mrs. C. D. Blake Thursday, July 14, honoring Mrs. Lloyd Reynolds, wife of Dr. Lloyd Reynolds. Mrs. F. E. Coffey gave a report of the annual meeting of the National Auxiliary in San Francisco.

Mrs. Coffey, in her President's Message, refers to the literature available for study. If members are interested they will find in the Journal issue for July, a comprehensive bibliography in Mrs. Hunter's paper. This list is worthy of clipping for reference.

The Central Kansas Medical Auxiliary met at the home of Mrs. A. E. O'Donnell September 29, in Ellsworth. After the business meeting Mrs. O'Donnell served tea and described her trip to Ireland during May and June. At 6:30 the Auxiliary members were dinner guests of the doctors at the country club, where Dr. O'Donnell showed pictures taken on his trip to Ireland.

Mrs. C. D. Blake and Mrs. F. E. Coffey were guests of the Saline County Auxiliary at an informal reception October 13, at the home of Mrs. John K. Harvey.

Sedgwick County Auxiliary opened the season's activity October 10 with a tea at the Innes Tea room from 2 until 5 P.M. Mrs. E. E. Tippin served as program chairman for the affair. Mrs. G. W. Kirby was in charge of the decorations which were in autumn theme. The program included greetings from the "Sedgwick County Medical Society", the president's message by Mrs. M. O. Nyberg, president of the Sedgwick County Auxiliary, and an interesting program of music under the direction of Dean Alan Irwin. Fifty-five were in attendance.

Mrs. Charles Rombold of the Sedgwick County Auxiliary is editor of the Twentieth Century Limited, the official organ of the Twentieth Century Club of Wichita.

## THE STOKES HOSPITAL

LOUISVILLE, KY.

*For the treatment of*

Alcoholism, Drug Addictions, Mental and Nervous Diseases

Phone Highland 2101 or Write for Rates and Folder

E. W. Stokes, Medical Director



## NEUROLOGICAL HOSPITAL

Twenty-Seventh and The Pasea  
Kansas City, Missouri

Modern Hospitalization of  
Nervous and Mental Ill-  
nesses, Alcoholism and  
Drug Addiction.

## THE ROBINSON CLINIC

G. WILSE ROBINSON, M.D.  
G. WILSE ROBINSON, JR., M.D.

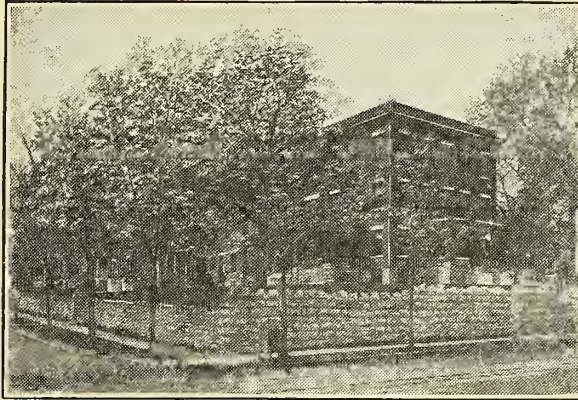
# THE MAJOR CLINIC

3100 Euclid Avenue, Kansas City, Missouri

HERMON S. MAJOR, M. D.  
Medical Director

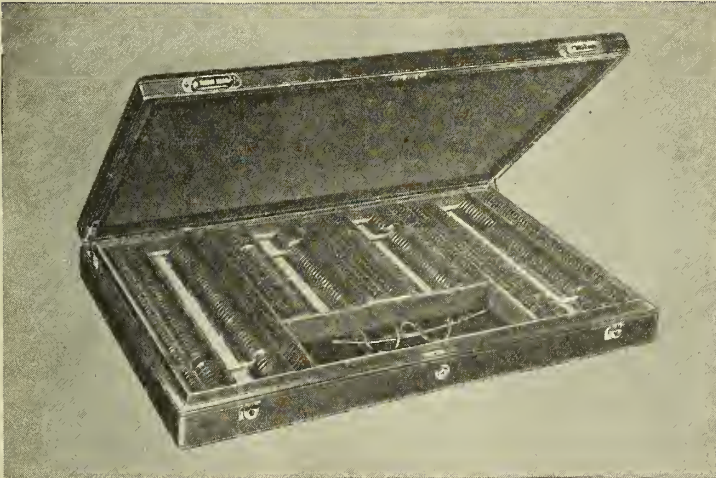
HENRY S. MILLETT, M. D.  
Associate Medical Director

Electricity  
Heat  
Water  
Light  
Exercise  
Massage  
Rest  
Diet  
Medicine



Nervous  
Diseases  
Selected  
Mental  
Cases.  
Alcohol  
Drug and  
Tobacco  
Addictions

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.



*It's a*  
**SIMPLIFIED**  
*Technique*

**The TILLYER  
Trial-Lens Way**

Senior Tillyer Deluxe Trial Set totals 289 pieces. Tillyer Trial Lenses give direct readings of the same effective power as the prescription in the finished lens.

There is an outstanding advantage of a simplified technique in using Tillyer trial lenses. The value indicated by each Tillyer trial lens or combination of lenses, represents the "effective" power of the corresponding prescription lens. Consequently, with Tillyer trial lenses, all trial readings are final, even when spheres and cylinders are used in combination. Prescriptions are read directly from trial readings. No matter how complicated the correction, approximations and complicated computations are eliminated. Why not take advantage of Tillyer trial lens convenience and accuracy? Ask your AO representative to show you.



**AMERICAN OPTICAL COMPANY**



## CLASSIFIED ADVERTISEMENTS

Morphine and Other Drug Addictions—Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. 28 years' experience. Dr. Weirick's Sanitarium, 162 South State St., Elgin, Ill.

For Sale: Tice's Practice of Medicine. Up-to-date and with International Abstracts for past fifteen years. Price, \$50.00. Also nose and throat treatment table with electric suction apparatus. Property of late Dr. W. A. Wehe. Address: Journal A. D. 579.

## The Mary E. Pogue School

Established 1903

*for exceptional children*

Individual instruction for backward and problem children of any age. Separate building for boys. Epileptics accepted. G. H. Marquardt, medical director. W. H. Holmes, consultant. Gerard N. Krost, pediatrician.

**Wheaton, Ill. Phone—Wheaton 66**  
40 Geneva Road

## Cook County Graduate School of Medicine

(In affiliation with COOK COUNTY HOSPITAL)  
Incorporated not for profit

### ANNOUNCES CONTINUOUS COURSES

**MEDICINE**—Personal Courses and Informal Courses starting every week. Two Weeks Course in Internal Medicine starting June 5, 1939.

**SURGERY**—General Courses One, Two, Three and Six Months; Two Weeks Intensive Course in Surgical Technique with practice on living tissue; Clinical Courses; Special Courses. Courses start every Monday.

**GYNECOLOGY**—Two Weeks Course starting February 27, 1939. Clinical and Personal Courses starting every week.

**OBSTETRICS**—Two Weeks Intensive Course starting March 13, 1939. Informal Course starting every week.

**FRACTURES & TRAUMATIC SURGERY**—Informal Course every week; Intensive Ten Day Course starting February 13, 1939.

**OTOLARYNGOLOGY**—Two Weeks Intensive Course starting April 10, 1939. Informal Course starting every week.

**OPHTHALMOLOGY**—Two Weeks Intensive Course starting April 24, 1939. Informal Course starting every week.

**CYSTOSCOPY**—Ten Day Practical Course rotary every two weeks.

**GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES.**

**TEACHING FACULTY—ATTENDING STAFF OF COOK COUNTY HOSPITAL**

Address: Registrar, 427 South Honore Street, Chicago, Illinois.



# OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request

**OAKWOOD SANITARIUM**  
Tulsa, Oklahoma, Route 6

NED R. SMITH, M.D.  
Resident Medical Director

# Any Questions?

Philip Morris know that you want *all* the facts — the whole significant story of Philip Morris' superiority. The tests made. The conclusions drawn. The *definite evidence* that Philip Morris are distinctly less irritating than other cigarettes.

Why not send for reprints of the studies published in scientific journals? They answer fully all questions on irritation due to smoking.

IN THE MEANTIME, you might make your own tests. Smoke Philip Morris. Recommend them to your patients. Let your own observations confirm the superiority of Philip Morris — *proved* a major advancement in cigarettes.

## PHILIP MORRIS

*Please Ask Us* any other questions that interest you on the physiological effects of smoking. Our research files contain exhaustive data from authoritative sources — from which we will gladly quote you.

PHILIP MORRIS & CO., LTD., INC., 119 Fifth Avenue, New York

Please send me copies of the reprints checked.

Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐ Laryngoscope, 1935, XLV, 149-154 ☐

N. Y. State Jour. Med., 1935, 35, No. 11, 590 ☐ Laryngoscope, 1937, XLVII, 58-60 ☐

NAME \_\_\_\_\_

(Please write name plainly)

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ KAN.



## THE KANSAS MEDICAL SOCIETY

### OFFICERS

President, N. E. Melencamp, M.D., Dodge City  
 President-elect, C. C. Nesselrode, M.D., Kansas City  
 First vice-president, F. L. Loveland, M.D., Topeka  
 Second vice-president, G. I. Thacher, M.D., Waterville  
 Secretary, H. L. Chambers, M.D., Lawrence  
 Treasurer, Geo. M. Gray, M.D., Kansas City

### COUNCILORS AND COUNCILOR DISTRICTS

FIRST DISTRICT—R. T. Nichols, M.D., Hiawatha, councilor. Marshall, Nemaha, Brown, Doniphan, Pottawatomie, Jackson, Atchison and Jefferson counties.

SECOND DISTRICT—L. F. Barney, M.D., Kansas City, councilor. Leavenworth, Wyandotte, Douglas, Johnson, Franklin, Miami, Anderson and Linn counties.

THIRD DISTRICT—L. D. Johnson, M.D., Chanute, councilor. Woodson, Crawford, Bourbon, Neosho, Montgomery, Cherokee, Labette, Wilson and Allen counties.

FOURTH DISTRICT—J. L. Lattimore, M.D., Topeka, councilor. Wabaunsee, Shawnee, Coffey, Morris, Osage, Lyon and Chase counties.

FIFTH DISTRICT—M. Trueheart, M.D., Sterling, councilor. McPherson, Stafford, Marion, Barton, Harvey, Reno and Rice counties.

SIXTH DISTRICT—W. P. Callahan, M.D., Wichita, councilor. Chautauqua, Greenwood, Sedgwick, Kingman, Sumner, Butler, Harper, Cowley and Elk counties.

SEVENTH DISTRICT—F. R. Croson, M.D., Clay Center, councilor. Republic, Mitchell, Cloud, Washington, Jewell, Riley and Clay counties.

EIGHTH DISTRICT—L. S. Nelson, M.D., Salina, councilor. Dickinson, Ellsworth, Saline, Ottawa, Geary and Lincoln counties.

NINTH DISTRICT—W. Stephenson, M.D., Norton, councilor. Cheyenne, Sheridan, Decatur, Wallace, Logan, Sherman, Thomas, Rawlins, Norton and Gove counties.

TENTH DISTRICT—C. D. Blake, M.D., Hays, councilor. Osborne, Graham, Russell, Smith, Phillips, Ellis, Trego and Rooks counties.

ELEVENTH DISTRICT—A. C. Armitage, M.D., Kinsley, councilor. Comanche, Hodgeman, Edwards, Pawnee, Kiowa, Rush, Pratt, Barber, and Ness counties.

TWELFTH DISTRICT—Geo. O. Speirs, M.D., Spearville, councilor. Hamilton, Stanton, Seward, Wichita, Stevens, Finney, Kearney, Lane, Greeley, Haskell, Meade, Clark, Grant, Scott and Ford counties.

Headquarters office, Columbian Building, Topeka.

Clarence G. Munns, Executive Secretary.

### THE TROWBRIDGE TRAINING SCHOOL

Established 1917

A HOME SCHOOL for NERVOUS and BACKWARD CHILDREN

The Best in the West

Beautiful Buildings and Spacious Grounds. Equipment Unexcelled. Experienced Teachers. Personal Supervision given each Pupil. Resident Physician. Enrollment Limited. Endorsed by Physicians and Educators. Pamphlet upon Request.

1850 Bryant Building

E. HAYDEN TROWBRIDGE, M.D.

Kansas City, Mo.

### MEET YOUR FRIENDS

At The

## HOTEL KANSAN

TOPEKA, KANSAS

300 Rooms

All Fire Proof

Rates \$1.50 to \$3.00

Popular Priced Coffee Shop in Connection  
 Also Main Dining Room and Private Dining Rooms

Try Our Dinette for Light Lunches

## COMMITTEES FOR 1938-1939

**EXECUTIVE**—N. E. Melencamp, M.D., Dodge City, Chairman; C. C. Nesselrode, M.D., Kansas City; H. L. Chambers, M.D., Lawrence; Geo. M. Gray, M.D., Kansas City.

**MEDICAL ECONOMICS**—F. L. Loveland, M.D., Chairman, Topeka; I. R. Burket, M.D., Ashland; W. R. Dillingham, M.D., Salina; H. M. Glover, M.D., Newton; J. F. Gsell, M.D., Wichita; A. L. Hilbig, M.D., Liberal; R. G. Klein, M.D., Dodge City; W. N. Mundell, M.D., Hutchinson; B. A. Nelson, M.D., Manhattan; A. J. Revell, M.D., Pittsburg; E. N. Robertson, M.D., Concordia.

**PUBLIC POLICY AND LEGISLATION**—E. C. Duncan, M.D., Chairman, Fredonia; R. G. Ball, M.D., Manhattan; W. F. Bernstorf, M.D., Winfield; L. L. Bresette, M.D., Kansas City; E. M. Ireland, M.D., Coats; D. R. Davis, M.D., Emporia; G. B. Morrison, M.D., Wichita; Robert Sohlberg, M.D., McPherson; R. W. Urie, M.D., Parsons; R. W. VanDeventer, M.D., Wellington.

**DEFENSE BOARD**—O. P. Davis, M.D., Chairman Emeritus, Topeka; L. S. Nelson, M.D., Chairman, Salina; James D. Bowen, M.D., Topeka; C. C. Stillman, M.D., Morganville.

**SCIENTIFIC WORK**—H. L. Chambers, M.D., Chairman, Lawrence; G. A. Finney, M.D., Topeka; Henry S. O'Donnell, M.D., Ellsworth.

**CONTROL OF CANCER**—C. C. Nesselrode, M.D., Chairman, Kansas City; L. G. Allen, M.D., Kansas City; C. D. Blake, M.D., Hays; F. R. Croson, M.D., Clay Center; A. W. Fegtly, M.D., Wichita; James Hibbard, M.D., Wichita; M. B. Miller, M.D., Topeka; Howard Snyder, M.D., Winfield; Marion Trueheart, M.D., Sterling.

**VENEREAL DISEASE**—A. D. Gray, M.D., Chairman, Topeka; O. W. Davidson, M.D., Kansas City; J. E. Henshall, M.D., Osborne; G. E. Kassebaum, M.D., ElDorado; O. W. Miner, M.D., Garden City; Harold Neptune, M.D., Salina; R. H. Riedel, M.D., Topeka; W. J. Singleton, M.D., La Crosse; J. V. Van Cleve, M.D., Wichita.

**PUBLIC HEALTH AND EDUCATION**—N. P. Sherwood, M.D., Chairman, Lawrence; Robert M. Carr, M.D., Junction City; E. P. Deal, M.D., Dighton; W. G. Emery, M.D., Wilson; G. R. Hastings, M.D., Lakin; Earl Mills, M.D., Wichita; C. T. Moran, M.D., Arkansas City; J. N. Sherman, M.D., Chanute; Maurice Snyder, M.D., Salina; J. B. Ungles, M.D., Satanta.

**HOSPITAL SURVEY**—A. R. Hatcher, M.D., Chairman, Wellington; V. E. Chesky, M.D., Halstead; I. E. Hempstid, M.D., Hutchinson; L. C. Joslin, M.D., Harper; C. E. Joss, M.D., Topeka; M. F. Russell, M.D., Great Bend; Cecil D. Snyder, M.D., Winfield.

**SCHOOL OF MEDICINE**—F. J. McEwen, M.D., Chairman, Wichita; Fred E. Angle, M.D., Kansas City; J. A. Blount, M.D., Larned; A. R. Chambers, M.D., Iola; L. R. McGill, M.D., Hoisington; Philip W. Morgan, M.D., Emporia; J. M. Porter, M.D., Concordia; L. F. Schuhmacher, M.D., Meade; L. B. Spake, M.D., Kansas City.

**CONSERVATION OF EYESIGHT**—Lyle S. Powell, M.D., Chairman, Lawrence; Geo. Gsell, M.D., Wichita; J. G. Janney, M.D., Dodge City; H. L. Kirkpatrick, M.D., Topeka; Clifford Mullen, M.D., Kansas City; W. M. Scales, M.D., Hutchinson.

**MATERNAL AND CHILD WELFARE**—Ray A. West, M.D., Chairman, Wichita; Porter Brown, M.D., Salina; L. A. Calkins, M.D., Kansas City; Howard Clark, M.D., Wichita; W. A. Grosjean, M.D., Colby; B. I. Krehbiel, M.D., Topeka; C. Meredith, M.D., Emporia; H. R. Ross, M.D., Topeka.

**STORMONT MEDICAL LIBRARY**—F. C. Taggart, M.D., Chairman, Topeka; D. A. Bitzer, M.D., Washington; L. M. Tomlinson, M.D., Harveyville.

**ENDOWMENT**—H. L. Chambers, M.D., Chairman, Lawrence; F. C. Boggs, M.D., Topeka; E. S. Edgerton, M.D., Wichita; J. L. Grove, M.D., Newton; P. A. Pettit, M.D., Paola.

**MEDICAL HISTORY**—W. S. Lindsay, M.D., Chairman, Topeka; J. A. H. Peck, M.D., St. Francis; F. E. Coffey, M.D., Hays; G. L. Kerley, M.D., Topeka.

**NECROLOGY**—C. W. Walker, M.D., Chairman, Eskridge; A. E. Gardner, M.D., Wichita; J. H. O'Connell, M.D., Topeka.

**CONTROL OF TUBERCULOSIS**—H. N. Tihen, M.D., Chairman, Wichita; E. K. Musson, M.D., Topeka; J. G. Hughbanks, M.D., Independence; C. H. Lerrigo, M.D., Topeka; N. C. Nash, M.D., Wichita; C. F. Taylor, M.D., Norton; R. L. Gench, M.D., Fort Scott; F. S. Hawes, M.D., Russell.

**AUXILIARY**—Omer C. West, M.D., Chairman, Kansas City; Cyril V. Black, M.D., Pratt; L. B. Gloyne, M.D., Kansas City; N. C. Morrow, M.D., Parsons; Omer M. Raines, M.D., Topeka.

**BORDERLINE GROUPS**—George E. Milbank, M.D., Chairman, Wichita; Henry E. Haskins, M.D., Kingman; Charles Rombold, M.D., Wichita; George E. Paine, M.D., Hutchinson; A. C. Eitzen, M.D., Hillsboro; Lyle F. Schmaus, M.D., Iola.

**PHARMACY**—R. W. Moore, M.D., Chairman, Lansing; H. W. Duvall, M.D., Hutchinson; Harry Lutz, M.D., Augusta; J. B. Ungles, M.D., Satanta; and A. J. Brier, M.D., Topeka.

**COMMITTEE ON AUTOMOBILE ACCIDENTS**—A. K. Owen, M.D., Chairman; F. P. Helm, M.D., Topeka; J. L. Latimore, M.D., Topeka; H. W. Powers, M.D., Topeka.



# THE JOURNAL OF THE KANSAS MEDICAL SOCIETY

## EDITORIAL BOARD

W. M. Mills, M.D., Editor, Topeka

L. E. Eckles, M.D., Topeka

L. R. Pyle, M.D., Topeka

R. B. Stewart, M.D., Topeka

Don C. Wakeman, M.D., Topeka

## INFORMATION

**Ownership:** The Journal is a non-profit publication owned and published monthly by The Kansas Medical Society.

**Subscription:** Membership in The Kansas Medical Society includes subscription to The Journal. Rates to others, except in foreign countries, are \$2.00 per year or 20c per copy.

**Material:** Scientific articles, editorials, and data of general interest are invited from all members. Articles are to be submitted on condition that they are contributed solely to this publication. A right is reserved to reject any material deemed unsatisfactory.

**Manuscripts:** Only manuscripts that are typewritten on one side, double spaced, and original copies can be accepted. Manuscripts will be returned upon request.

**Advertising:** All advertising contracts, and all copy from advertisers under contract are subject to approval of the editorial board. Copy should be received by the 25th of each month to insure publication.

**Reprints:** Actual cost prices for reprints will be quoted upon request. Reprints should be ordered promptly after publication or forms may not be available.

**Non-Responsibility:** Although an effort is made to publish only accurate articles and legitimate advertisements, The Journal denies legal responsibility for any statements, opinions, or advertisements appearing under the names of contributors or concerns.

Publication office: Columbian Building, Topeka.

Clarence G. Munns, Business Manager.



## OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request

**OAKWOOD SANITARIUM**  
Tulsa, Oklahoma, Route 6

NED R. SMITH, M.D.  
Resident Medical Director

## COUNTY MEDICAL SOCIETIES

COUNTY	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
Allen.....	H. M. Webb, M.D.	Humboldt	O. L. Cox, M.D.	Iola
Anderson.....	O. N. Clark, M.D.	Greeley	Ralph White, M.D.	Garnett
Atchison.....	A. Whitaker, M.D.	Atchison	W. L. Anderson, M.D.	Atchison
Barber.....			K. R. Grigsby, M.D.	Medicine Lodge
Barton.....	T. J. Brown, M.D.	Hoisington	L. R. McGill, M.D.	Hoisington
Bourbon.....	W. T. Wilkening, M.D.	Fort Scott	L. L. Cooper, M.D.	Fort Scott
Brown.....	Edward K. Lawrence, M.D.	Hiawatha	Paul E. Conrad, M.D.	Hiawatha
Butler-Greenwood	J. H. Johnson, M.D.	El Dorado	W. E. Janes, M.D.	Eureka
Central Kansas	George F. Zerzan, M.D.	Holyrood	Alza McDermott, M.D.	Ellis
Chautauqua.....	E. A. Marrs, M.D.	Sedan	Estelle Edwards, M.D.	Cedar Vale
Cherokee.....	Frances E. Wynne, M.D.	Baxter Springs	W. H. Iliff, M.D.	Baxter Springs
Clay.....	C. C. Lewis, M.D.	Abilene	F. R. Croson, M.D.	Clay Center
Cloud.....	C. D. Kosar, M.D.	Concordia	J. M. Porter, M.D.	Concordia
Coffey.....	A. N. Gray, M.D.	Burlington	A. B. McConnell, M.D.	Burlington
Comanche.....	R. A. J. Shelly, M.D.	Coldwater	Paul Lindquist, M.D.	Coldwater
Cowley.....	L. P. Ravenscroft, M.D.	Winfield	W. Bernstorff, M.D.	Winfield
Crawford.....	E. J. Schulte, M.D.	Girard	W. G. Rinehart, M.D.	Pittsburg
Dickinson.....	Guilford G. Greenlee, M.D.	Chapman	A. D. Danielson, M.D.	Herington
Doniphan.....	C. E. Waller, M.D.	Troy	Ray Meidinger, M.D.	Highland
Douglas.....	Lyle S. Powell, M.D.	Lawrence	J. M. Mott, M.D.	Lawrence
Edwards.....	F. E. Dargatz, M.D.	Kinsley	F. G. Meckfessel	Lewis
Elk.....	R. C. Harner, M.D.	Howard	F. L. Depew, M.D.	Howard
Finney.....	Sanford Bailey, M.D.	Garden City	H. C. Sartorius, M.D.	Garden City
Ford.....	C. L. Williams, M.D.	Dodge City	C. M. Alderson, M.D.	Dodge City
Franklin.....	J. F. Barr, M.D.	Ottawa	G. W. Davis, M.D.	Ottawa
Geary.....	W. A. Smiley, M.D.	Junction City		
Harper.....	C. E. Ressler, M.D.	Anthony	P. G. Miller, M.D.	Anthony
Harvey.....	D. V. Conwell, M.D.	Halstead	J. A. Grove, M.D.	Newton
Jackson.....	C. A. Wyatt, M.D.	Holton	Roy Moser, M.D.	Holton
Jefferson.....	J. M. Marks, M.D.	Valley Falls	D. M. Stevens, M.D.	Oskaloosa
Jewell.....	J. E. Hawley, M.D.	Burr Oak	C. W. Inge, M.D.	Formoso
Johnson.....	A. S. Reece, M.D.	Gardner	Frank Tolle, M.D.	Overland Park
Kingman.....	Fred Burnett, M.D.	Cunningham	H. E. Haskins, M.D.	Kingman
Labette.....	A. C. Baird, M.D.	Parsons	L. A. Proctor, M.D.	Parsons
Leavenworth.....	Robert Moore, M.D.	Lansing	W. I. Pratt, M.D.	Leavenworth
Lincoln.....	J. M. Sutton, M.D.	Lincoln	W. G. Emery, M.D.	Barnard
Linn.....	Allen Spafford, M.D.	Parker	H. L. Clarke, M.D.	LaCygne
Lyon.....	Harris W. Manning, M.D.	Emporia	C. H. Munger, M.D.	Emporia
McPherson.....	A. H. Dyck, M.D.	McPherson	A. M. Lohrenz, M.D.	McPherson
Marion.....	J. B. Nanninga, M.D.	Goesell	R. R. Melton, M.D.	Marion
Marshall.....	D. M. Diefendorf, M.D.	Waterville	Henry Haerle, M.D.	Marysville
Meade-Seward.....	W. N. Lemmon, M.D.	Liberal	Leon W. Zimmerman, M.D.	Liberal
Miami.....	Clifford Van Pelt, M.D.	Paola	P. F. Gatley, M.D.	Louisburg
Mitchell.....	H. B. Vallette, M.D.	Beloit	Ward Weltmer, M.D.	Beloit
Montgomery.....	P. S. Townsend, M.D.	Coffeyville	C. O. Shepard, M.D.	Independence
Monrovia.....	A. S. Ross, M.D.	Sabetha	S. Murdock, M.D.	Sabetha
Neosho.....	James A. Butin, M.D.	Chanute	J. F. Edwards, M.D.	Chanute
Northwest.....	G. W. Hammell, M.D.	Hoxie	D. D. Vermillion, M.D.	Goodland
Osage.....	Fred Schenck, M.D.	Burlingame	F. M. Smith, M.D.	Lyndon
Osborne.....	J. W. Cross, M.D.	Portis	Andrew Brown, M.D.	Osborne
Pawnee.....	Charles Starr, M.D.	Larned	Mary H. Elliot, M.D.	Larned
Pottawatomie.....	Ben J. Brunner, M.D.	Wamego	L. W. Cazier, M.D.	Wamego
Pratt.....	Herbert Atkins, M.D.	Pratt	Athol Cochran, M.D.	Pratt
Reno.....	G. A. Chickering, M.D.	Hutchinson	W. N. Mundell, M.D.	Hutchinson
Republic.....	F. C. Tyree, M.D.	Wayne	M. D. McComas, M.D.	Courtland
Rice.....	A. W. Schmidt, M.D.	Lyons	C. E. Fisher, M.D.	Lyons
Riley.....	M. W. Husband, M.D.	Manhattan	Kellogg Bascom, M.D.	Manhattan
Rush-Ness.....	L. A. Latimer, M.D.	Alexander	T. F. Brennan, M.D.	Ness City
Saline.....	E. M. Sutton, M.D.	Salina	Maurice Snyder, M.D.	Salina
Sedgwick.....	G. B. Morrison, M.D.	Wichita	Earl L. Mills, M.D.	Wichita
Shawnee.....	W. W. Reed, M.D.	Topeka	F. C. Taggart, M.D.	Topeka
Smith.....	D. W. Relihan, M.D.	Smith Center	V. E. Watts, M.D.	Smith Center
Stafford.....	J. J. Tretbar, M.D.	Stafford	John W. Hertzler, M.D.	St. John
Sumner.....	Farris Evans, M.D.	Conway Springs	J. M. McGrew, M.D.	Wellington
Wabaunsee.....	A. A. Meyer, M.D.	Eskridge	Ellis B. McKnight, M.D.	Alma
Washington.....	Henry Smith, M.D.	Washington	F. H. Rhoades, M.D.	Hanover
Wilson.....	B. P. Smith, M.D.	Neodesha	E. C. Duncan, M.D.	Fredonia
Woodson.....	A. C. Dingus, M.D.	Yates Center	H. A. West, M.D.	Yates Center
Wyandotte.....	H. W. King, M.D.	Kansas City	D. N. Medearis, M.D.	Kansas City

## OFFICIAL REPRESENTATIVES

COUNTY	OFFICIAL REPRESENTATIVE	ADDRESS
Chase.....	Jacob Hinden, M.D.	Strong City
Cheyenne.....	T. J. Walz, M.D.	St. Francis
Clark.....	I. R. Burket, M.D.	Ashland
Decatur.....	L. D. Tilden, M.D.	Oberlin
Ellis.....	O. A. Hennerich, M.D.	Hays
Ellsworth.....	Alfred O'Donnell, M.D.	Ellsworth
Gove.....	B. S. Morris, M.D.	Quinter
Graham.....	I. B. Parker, M.D.	Hill City
Grant.....	R. H. Miller, M.D.	Ulysses
Gray.....	J. W. Spearing, M.D.	Cimarron
Greeley.....	J. D. Wilson, M.D.	Tribune
Hamilton.....	Charles F. Harrison, M.D.	Syracuse
Haskell.....	J. B. Ungles, M.D.	Satanta
Hodgeman.....	C. B. Wycoff, M.D.	Jetmore
Kearney.....	C. R. Hastings, M.D.	Lakin
Kiowa.....	C. D. Updegraff, M.D.	Greensburg
Lane.....	E. P. Deal, M.D.	Dighton

COUNTY	OFFICIAL REPRESENTATIVE	ADDRESS
Logan.....	W. F. Deal, M.D.	Oakley
Morris.....	C. C. Kerr, M.D.	Council Grove
Morton.....	F. H. Buckmaster, M.D.	Dodge City
Norton.....	Walter Stephenson, M.D.	Norton
Ottawa.....	C. D. Vermillion, M.D.	Tescott
Phillips.....	J. L. Shewmaker, M.D.	Phillipsburg
Rooks.....	F. E. Richmond, M.D.	Stockton
Russell.....	F. S. Hawes, M.D.	Russell
Scott.....	R. F. Kippenberger, M.D.	Scott City
Sheridan.....	G. W. Hammill, M.D.	Hoxie
Sherman.....	M. J. Renner, M.D.	Goodland
Stanton.....	W. F. Hoover, M.D.	Johnson
Stevens.....	W. R. Kenoyer, M.D.	Hugoton
Thomas.....	James L. Jensen, M.D.	Colby
Trego.....	W. Y. Herrick, M.D.	Wakeeney
Wallace.....	Hugo E. Nelson, M.D.	Sharon Springs
Wichita.....	L. S. Orr, M.D.	Leoti



**P**ROGRESS in the therapeutic field is the aim of the Lilly Research Laboratories. Research accomplishes this progress. Confidence on the part of the medical profession should be reserved for medicinal products which are supported by adequate laboratory and clinical research. ✓ Look for the Lilly trade-mark.



### FOR SPINAL ANESTHESIA

Ampoules 'Metycaine' (Gamma-[2-methyl-piperidino]-propyl Benzoate Hydrochloride, Lilly) 10 percent, 2 cc., give prompt, sustained anesthesia.

### FOR REGIONAL NERVE BLOCK

Ampoules 'Metycaine' 20 percent, 5 cc., are supplied. (To be diluted before using.)

*Literature will be supplied to physicians  
upon request*

**ELI LILLY AND COMPANY**  
INDIANAPOLIS, INDIANA, U. S. A.

# The Journal Of THE KANSAS MEDICAL SOCIETY

*Owned and Published by The Kansas Medical Society*

Volume XXXIX

DECEMBER, 1938

Number 12

## FRACTURES OF THE METACARPALS AND PHALANGES

Charles K. Wier, M. D.

Wichita, Kansas

Fracture of the bones of the hand are usually the result of direct violence and occur most frequently in men who earn their living by some form of manual labor. Hence, failure to reduce and maintain reduction until firm bony union has taken place, will result in permanent disability and loss of earning power of the patient.

### THE METACARPALS, SECOND TO FIFTH

Fractures of the proximal third of these metacarpals seldom show much displacement as the fragments are held in place by their neighbors and by the muscles and the ligaments on the dorsal and palmar surfaces of the hand. An anterior and a posterior molded plaster splint held in place by a few turns of plaster will often be the only dressing needed. The splint should not include the metacarpophalangeal joints of the uninvolved fingers. After the acute swelling has subsided, a fresh splint may be necessary.

In fractures of the lower two-thirds of the metacarpals the deformity is usually typical. (Figure 1 and 2.) The lower end of the distal fragment is pulled into the palm by the bow string action of the interossei and the long flexors. There is an angulation toward the palmar surface. If union is allowed to take place in this position, even though the angulation is not great, lasting disability follows as the patient will not be able to grasp tools without having considerable pain at the metacarpal head, and when the metacarpophalangeal joint is extended the finger is not in line with the normal fingers.

Bandage rolls have been frequently used for immobilization of this type of fracture. While this and similar palmar splints with rounded surfaces may be satisfactory for fractures with no displacement, their use appears illogical as they do just

what should not be done to those fractures with usual deformity, causing pressure to be exerted at the fracture site on the palm, when what is needed is pressure on the dorsal surface at the point of fracture with counter pressure on the palmar surface at the proximal and distal ends of the bone. Any splint which does this will hold the fragments in



Figure 1. Diagram of mechanics of pull exerted by interosseus muscle which causes typical flexion deformity.

place after reduction has been accomplished. Heavy coat-hanger wire can easily be fashioned into an efficient, light splint which does not inhibit movement of the uninvolved fingers. The wire is bent into the shape of a hair pin, the distal or loop end is again bent so that it will extend up to about the middle flexion crease of the palm. The

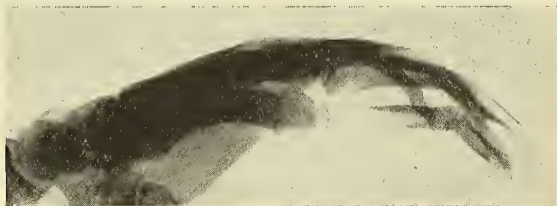


Figure 2. Old fracture of the second metacarpal healed in malposition. Notice that the distal end of bone projects into the palm.

two wires forming the proximal end of the splint are bent at right angles to the long axis of the splint, then curved so that they will encircle the fore-arm about six inches above the wrist. (Figure 4.) After reduction the injured finger is slipped through the splint, a pad of felt is placed over the fracture on the dorsal and another over the palmar surface of the distal portion of the metacarpal. Any



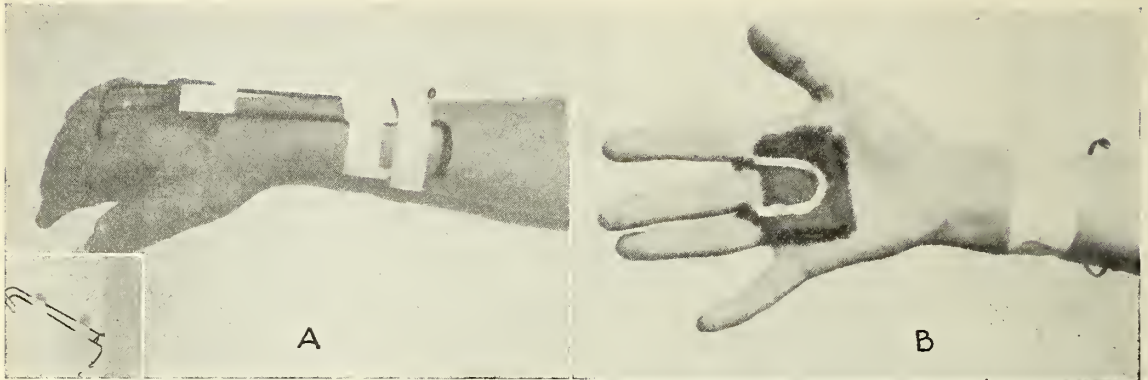


Figure 4. A. Dorsal view splint applied for fracture at the middle of the third metacarpal. All padding omitted except that immediately over the fracture. B. Palmar view, showing thick felt pad between splint and head of bone. The involved finger should be held in flexion either with adhesive or bandage until fibrous union has taken place. Inset, splint.

other points which will be subjected to pressure should be well padded. The splint is held in place by adhesive. Oblique and comminuted fractures may require continuous traction to maintain reduction, and this is easily obtained by a wire splint of the Böhler type, or a strip of aluminum incorporated in plaster of paris. (Figure 5.)

#### THE FIRST METACARPAL (Bennetts' Fracture)

The movements of the first metacarpal are much freer than that of the other metacarpals, hence the greater usefulness of the thumb. The most common point of fracture is at some point between the middle and the proximal end of the bone. The carpo-metacarpal joint is often involved. The deformity here is the same as that the other four metacarpals, with an angulation on the palmar surface due to the contraction of the flexor longus pollicis and brevis muscles. There is also shortening if the proximal fragment is comminuted. (Figure 7.)

Extreme abduction of the thumb will usually overcome the angulation. If the proximal fragment is comminuted and there is shortening, wide abduction plus continuous traction will be necessary to hold the fragments in place until union has taken place. After the traction appliance has been fixed in place, manual traction is made on the thumb while the comminuted fragments are molded into as near the normal shape as possible.

#### THE PHALANGES

Fractures of the proximal phalanges usually show a characteristic deformity, due to the action of the interossea, which flex the proximal fragment, resulting in an angulation which faces the dorsal surface of the finger. (Figure 10.) Reduction is obtained by traction, and flexion of the finger, bringing the distal fragment into alignment with the



Figure 11. Wire splint of the Böhler type made of 3/16 wire for use in fractures of the phalanges. Traction obtained by means of piece inner tubing running from proximal end of splint across web between index finger and thumb. All padding omitted. Inset, splint.

proximal. This is the fracture in which a roller bandage can be used for immobilization, however this makes a clumsy dressing and interferes with movement of the uninjured fingers. A wire splint of the Böhler type is just as effective and less clumsy and its convenience is appreciated by the patient. If necessary a certain amount of traction can be obtained by passing a heavy rubber band thru the loop in the proximal end of the splint then putting the hand thru the band, traction being obtained by pressure on the web between the thumb and first finger. (Figure 11.) If used in this manner the proximal part of the splint should be bound to the forearm with bandage instead of adhesive plaster.

Fracture of the proximal phalange of the thumb is reduced in the same manner as fractures of this bone in the other digits. We have found however that there is greater difficulty in maintaining the reduction. If the thumb is flexed over a bandage roll a lateral angulation of the fragments occurs, and the distal fragment will rotate out of line with the proximal. This difficulty can be overcome by abducting the thumb at the same time that it is flexed. In other words the thumb should lie in the palm. A strip of plaster,  $\frac{1}{4}$ "x1"x10", molded

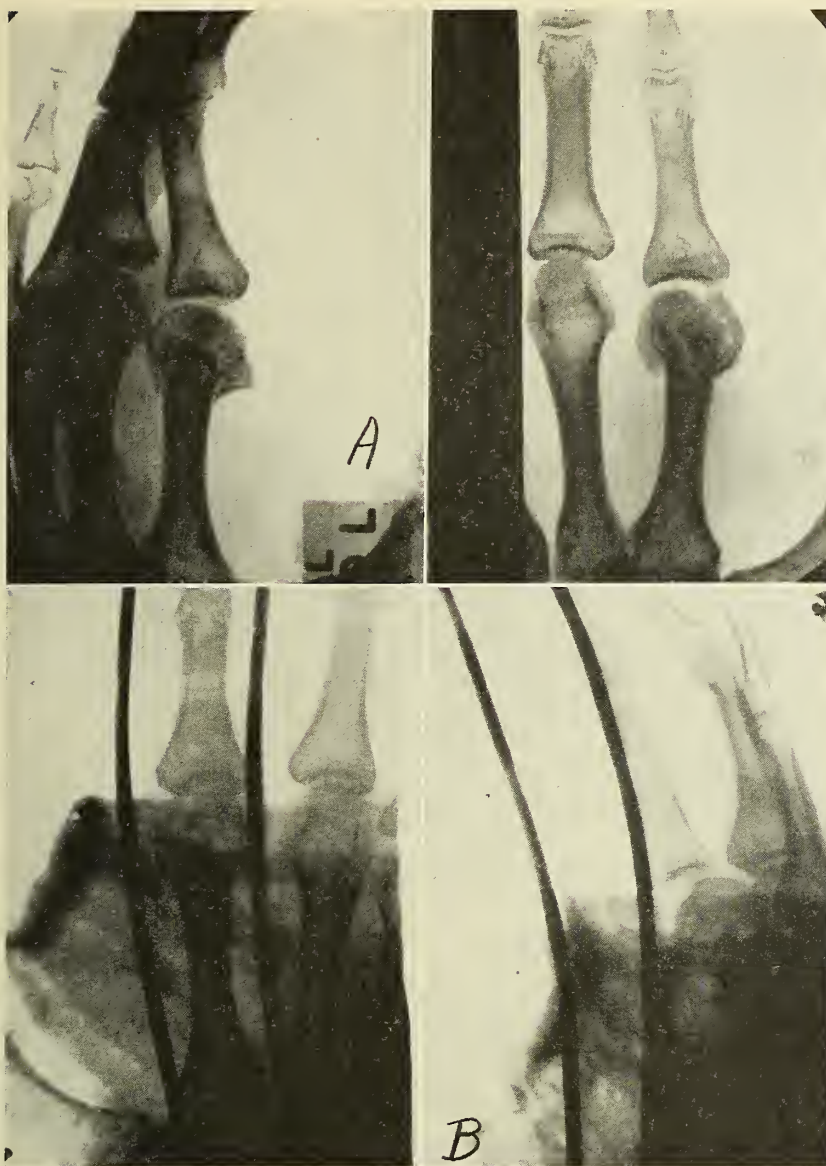


Figure 5. A. Mushroom fracture of the head of second metacarpal. B. After reduction by manual traction and molding of fragments. This type of fracture will not stay reduced, as a rule, unless continuous traction is used until fibrous union has occurred.

to the dorsal surface of the flexed and adducted thumb, and to the lower third of the radial side of the forearm, bound to the hand and forearm, by a few turns of plaster has proven successful.

#### THE MIDDLE PHALANGES

The flexor sublimis tendons are bifurcated an inch proximal to their insertion and the two ends are attached at the middle of the lateral sides of the middle phalange. Fractures above this insertion result in flexion of the distal fragment and after reduction are immobilized with the finger in complete extension. (This is one of the few instances in which splinting in extension is indi-

cated.) Fractures below the tendon insertion result in flexion of the proximal fragment and extension of the distal one, producing the same deformity as is usually seen in fracture of the proximal phalange, and the finger should be immobilized in the same position of flexion.

#### THE DISTAL PHALANGES

The majority of fractures of the distal phalange consist of stellate breaks in the tip of the bone and are as a rule associated with a hematoma under the nail. No special treatment is necessary other than evacuation of the hematoma to relieve the pain and a protective dressing.

So called "baseball fingers" result when the extensor tendon is torn from its insertion at the proximal end of the dorsal surface of the phalange, a small triangular fragment of bone usually remaining attached to the tendon. After reduction, the distal interphalangeal joint should be held in hyperextension. A simple, easily applied splint can be made by encasing the finger in a plaster of paris bandage, and holding the distal joint in hyperextension until the plaster has set. If the proximal interphalangeal joint is at the same time held in slight flexion, the plaster casing will be held firmly in place.

#### SUMMARY

In those fractures which are the result of great violence, much swelling will follow, for which due consideration must be given, when the first dressing is applied. At times so much swelling may be present that it will be impossible to bring a finger or thumb into as much flexion as needed to obtain perfect alignment of the fragments, without disturbance of the circulation. In these cases it may be necessary to wait twenty-four to forty-eight hours before completing the reduction, in the meantime keeping the hand at rest in the elevated position.



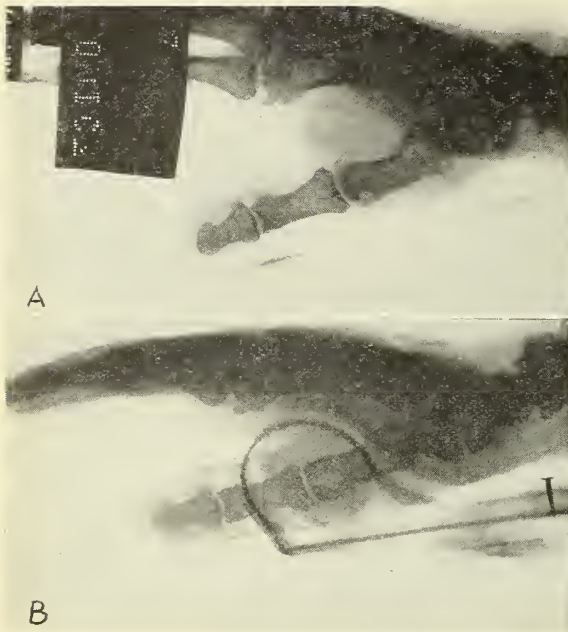


Figure 7. Bennett's fracture. A. Before reduction. B. After reduction and continuous traction for three weeks.

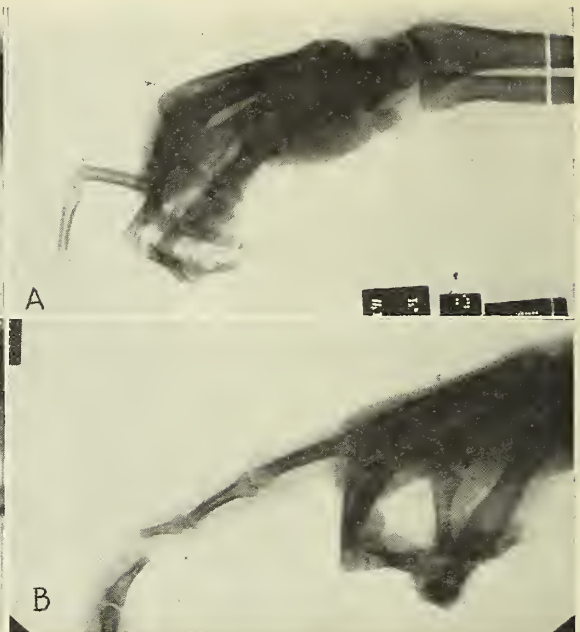


Figure 10. A. Compound fracture of proximal phalanx of second finger showing the usual displacement. B. Shows final result.

No constricting bandages should be placed about the wrist. All points which will be subjected to pressure should be adequately padded. After the acute swelling has subsided the original dressing may have lost its effectiveness and should be replaced by a new one.

The metacarpals and phalanges are composed chiefly of cancellous bone and heal rapidly. Usually within four weeks the fracture has united to such an extent that the immobilizing dressing can be removed.

Active motion of the joints of the uninjured fingers should not be hindered by the splint used, and active motion of the joints of the injured fingers should be obtained at the earliest possible time. If this is done a great deal of physiotherapy will not be necessary after the splints are removed.

Unless specifically contraindicated, local anesthesia is the choice in these fractures. The bones all lie just beneath the skin, and the technic is simple. If sufficient time is allowed to elapse, after injection of the anesthetic, complete analgesia and muscle relaxation can be obtained in the majority of cases. In compound fractures of the bones of the hand, local nerve block of the median, ulna and radial nerves at the wrist affords excellent analgesia. Compound wounds should be thoroughly debrided at the earliest possible time. Bone ends which have had foreign matter ground into their surfaces should be removed with bone biting forceps. Severed tendons should be united with fine silk sutures, providing the patient is seen within four hours after

injury. Cases which have gone longer than this will as a rule fare better if subjected to a secondary tendon suture after the wound has completely healed. This applies particularly to the flexor tendons, all of which are inclosed in a synovial sheath.

## BIBLIOGRAPHY

- Magnuson: *Fractures*, J. B. Lippincott Company 1933.  
 McNealy and Lichenstein: *Surgery, Gynecology and Obstetrics*, November 1933.  
 Christopher: *Textbook of Surgery*, W. B. Saunders Company, 1937.  
 Scudder: *The Treatment of Fractures*, W. B. Saunders Company, 1926.  
 Key and Conwell: *Fractures, Dislocations and Sprains*, C. V. Mosby Company, 1935.  
 Böhler: *Treatment of Fractures*, Fourth English Edition, William Wood and Company, 1935.  
 Jahss, S. A.: *Fractures of the Metacarpals*, *Journal Bone and Joint Surgery*, January, 1938.

The Conference of State and Provincial Health Authorities of North America, in executive session at Kansas City, Mo., October 26, passed the following resolution:

Resolved, By the State and Provincial Health Authorities of North America, assembled in special session this twenty-sixth day of October, nineteen thirty-eight, that we hereby express our appreciation and commendation to the House of Delegates of the American Medical Association for their considered action this past September concerning the recommendations laid before our profession at the National Health Conference at Washington, D. C., this past July.

F. J. Underwood, President.

A. J. Chesley, Secretary.

# THE USE OF BENZEDRINE SULPHATE IN A CASE OF ENCEPHALITIS LETHARGICA AS A SEQUELA TO MEASLES

A. J. Revell, M. D.

Pittsburg, Kansas

Benzedrine (beta-aminopropylbenzene) has gained a prominent place in the literature during the past two years relative to its stimulating action upon the central nervous system. Wilbur, MacLean, Allen<sup>1</sup> Nathanson<sup>2</sup> observed the favorable effects obtained in cases of mental depression and fatigue. With few exceptions, there was a marked amelioration of fatigue and a sense of well being. The results obtained in the use of benzedrine in cases of narcolepsy have been most gratifying<sup>3</sup>. Favorable results have also been obtained in the treatment of Postencephalitic Parkinsonism<sup>4,5</sup> and Reifenshtein and Davidoff<sup>6</sup> report favorable and interesting results in the treatment of alcoholic psychoses.

As there is no accepted specific treatment for encephalitis lethargica and considering the profound central nervous system depression encountered in this condition, we felt that the use of benzedrine sulphate in this case was rational and justified.

## REPORT OF CASE

P.M., a white female child, age five, developed measles on May 9, 1938. The eruption disappeared in four days. On May 13 we were called to see the patient because her parents felt she was not convalescing as quickly as she should. They stated she was very nervous, was extremely weak and perspired profusely about the face and forehead. Physical examination at this time was essentially negative except for the profuse perspiration about the forehead. The patient was seen again on May 15. At this time the restlessness and perspiration had increased materially and she moaned and cried a great deal. The patient was unable to swallow or talk.

Physical examination revealed a temperature of 98.4 degrees F., pulse 106, respiration 32, tonsils hypertrophied and infected. Forehead and head covered with beads of perspiration although the remainder of the body was dry. There were marked clonic convulsions of the masseter muscles, hands, forearms and arms upon motion of the mouth or body. There was absence of cervical rigidity and Kernig's sign was not present. The pupils were moderately dilated, equal and regular, and reacted

to light. The accommodation reflex could not be checked because of inability of the patient to cooperate. All tendon reflexes were absent. Babinski pathological toe signs were present bilaterally. Ankle clonus could not be elicited. Upon questioning the parents as to the child's past history it was learned the patient had had a mild case of rickets during infancy, had always been frail and under-nourished and had never been fond of milk. A tentative diagnosis of tetany due to calcium deficiency was made because of this history and the physical findings of localized sweating on the head and the clonic convulsions of the hands, forearms, arms and masseters.

The patient was sent to the hospital and the laboratory findings upon admission showed the urine to be negative except for two plus acetone and two plus indican; Kahn negative; blood sugar 112 mgs.; hemoglobin 100 per cent (Sahli); erythrocytes 4,480,000; leukocytes 18,000; polys 88 per cent; lymphocytes 12 per cent; blood calcium 11.2 mgs. Permission for spinal puncture was refused by the parents.

The following day there was a flaccid paralysis of arms and legs and deep coma with incontinence of urine and feces. The pupils were dilated and the light reflex was absent as was also the swallowing reflex. Slight clonic convulsions of the jaws were still present. On the third day of hospitalization the pulse was 106, respiration 60 and temperature 106 degrees F. per rectum. Slight cough was present. A blood count showed a leukocytosis of 22,050 with a differential of 86 per cent polys and 14 per cent lymphocytes. The roentgenologist's report of chest x-ray was increased density in right hilus with no definite evidence of consolidation. The patient was cyanotic and dyspneic, but these symptoms were relieved by oxygen through a nasal catheter, together with atropine and coramine at regular intervals.

In the interval between May 17 and May 26 the temperature fluctuated between 106 degrees F. and 99.6 degrees F. The pulse between 136 and 80 and the respirations between 60 and 22. On several occasions during this time the patient became very cyanotic and clammy and the pulse extremely thready and it appeared as though she would expire; but on each occasion her condition improved by change of position, atropine and coramine per hypo. Oxygen was administered constantly and nutrition was maintained by nutrient enemas, glucose intravenously and three per cent glucose in physiological saline per hypodermoclysis. X-ray of the chest on May 19 showed a definite hilus pneumonia bilaterally.

On May 28 benzedrine therapy was started. The



patient at this time was paralyzed in all the extremities. The temperature was 102 degrees F. Although the eyes were opened at intervals, there was no recognition of objects. Benzedrine 0.5 mg. was given three times daily. On May 29 the patient seemed better, swallowing was better and her eyes were open for longer intervals. On May 31 the dose of benzedrine was increased to three times daily. On June 2 the patient was able to move her left leg. On June 3 she was able to move both left leg and arm and was crying at times. Improvement progressed until on June 15 the patient was swallowing easily, and her eyes remained open all the time with constant crying, and never ceasing clonic contractions of hands, feet and masseter muscles; but there was no sign of recognition when spoken to. On this date benzedrine therapy was discontinued and the patient remained in this condition for six days requiring phenobarbital and morphine to quiet her. At this time her temperature was normal and all the symptoms of pneumonia were gone.

On June 21 benzedrine therapy was reestablished with ten mg. three times daily. On June 22 the patient began talking and made a rapid and uneventful recovery. Benzedrine therapy was continued for five days. This patient was able to walk two weeks later, and there were no physical or mental residual symptoms or findings. Within one month she weighed four pounds more than before she became sick. The patient was last seen September 6 and has been feeling fine, and has evidently made a complete recovery.

### CONCLUSIONS

Benzedrine sulphate used in a case of encephalitis lethargica as a sequela to measles apparently stimulated the central nervous system with recovery of patient without physical or mental residual pathology.

### BIBLIOGRAPHY

1. Wilbur, D. L., MacLean, A. R. and Allen, E. V.: Clinical Observations on the effect of Benzedrine Sulphate, Proctologic Staff Meeting Mayo Clinic, 12:97-104 February 17, 1937.
2. Nathanson M. H.: The Central Action of Aminopropylbenzene (Benzedrine), Journal of American Medical Association, 108: 528-531, February 13, 1937.
3. Prinzmetal Myron and Bloomberg, Wilfred, The Use of Benzedrine for the treatment of Narcolepsy, Journal of American Medical Association, 105:2051-2054, December 21, 1935.
4. Solomon, Philys, Mitchell Roger S. and Prinzmetal, Myron: The Use of Benzedrine Sulphate in Post Encephalic Parkinson's Disease, Journal of American Medical Association, 108:1765-1770, May 22, 1937.
5. Davis, Park Lee and Steward, Winifred B.: The Use of Benzedrine Sulphate in Post Encephalic Parkinson's Disease, Journal of American Medical Association, 110:1890-1892, June 4, 1938.
6. Reifenshtein, Edward C. Jr., and Davidoff, Eugene: The Treatment of Alcoholic Psychoses with Benzedrine Sulfate, Journal of American Medical Association, 110:1811-1813, May 28, 1938.

## GLOMIC TUMOR WITH REPORT OF A CASE

M. Gerundo, M. D., and W. M. Mills, M. D.

Topeka, Kansas

Masson was the first to call attention to these glomic formations and indisputably connect them to the coccygean glomus and point out the relation of the digital and coccygeal glomuses with the tactile organs. The physiology of the glomuses is variously interpreted, and possibly their function is the regulation of the blood pressure or the stabilization of the capillary pressure and the regulation of temperature. The capillary pressure is regulated by vasomotor phenomena, originating from the corpuscles of Pacini or lamellar tactile corpuscles. According to the original conception of Masson, the glomus functions like a manometer capable of controlling the arterial pressure and the interstitial dermic pressure through vasomotor reflexes. Masson also points out the topographic relation of the glomus with the corpuscles of Wagner-Meissner, and also the sclerosis of both these elements in pathologic cases, as syringomyelia, senescence.

In a subsequent work, Masson defines the glomus tumor as an angioma originating from a subungueal artery, formed by arterioles, having a modified muscular wall, whose elements have the relation of symplastic continuity with the nerve fibers and bundles.

At first the glomus was thought to be found only in the coccygeal region and under the nail bed, but later on Masson and Gery and Assen Prodanoff published some cases of glomus tumors outside these locations and in the subcutaneous tissue, where they give origin to painful sensations, (location in the thigh).

Kofler, in discussing these tumors, thinks they are neoplastic proliferation of an arteriovenous anastomosis, with the participation of nerves. According to his point of view, they may be related to the corpuscles of Ruffini. He calls attention to the fact that these tumors may undergo a malignant metamorphosis and describes a case in which, besides typical glomic elements, there were elements resembling myoblastic sarcoma.

Masson affirms that the glomus, acting as a valve or pump for the capillary blood flow, directly influences the fluid tension and the nutrition of the tissues. Such action is possible by the fact that the afferent artery of the glomus loses its internal elastic membrane and the coat of the smooth muscle cells gradually is transformed into a syncytium of cells



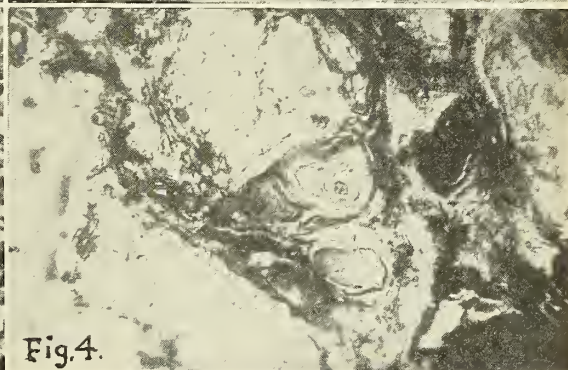
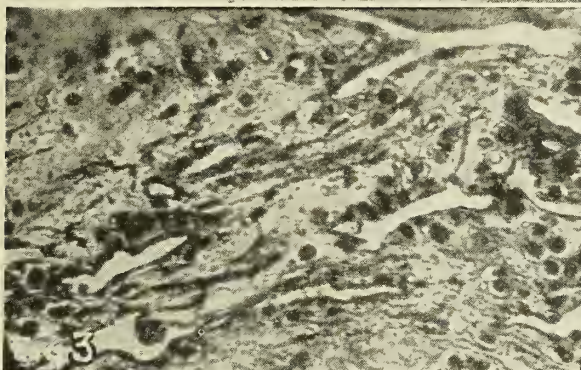
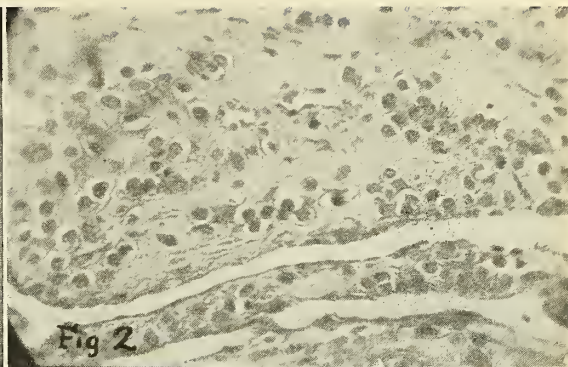
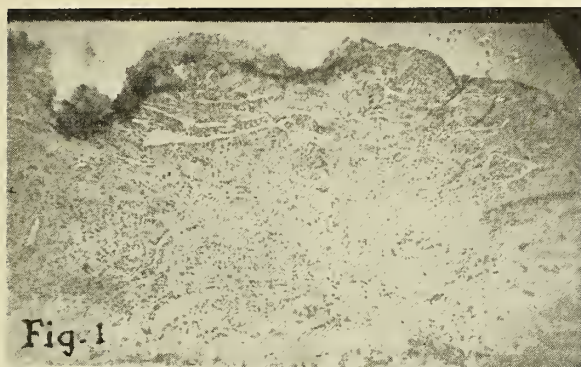


Fig. 1—Low power of the tumor.

Fig. 3—Silver Stain of the tumor, showing numerous nerve fibers.

Fig. 2—High Power of the tumor. Note the capillaries and the thick layer of epithelioid cells.

Fig. 4—Note the lamellated tactile corpuscles in vicinity of the tumor.

furnished with myofibrils, and then into a thick layer of epithelioid cells, having no myofibrils. A thick network of unmyelinated nerve fibers, derived from the dermal nerves, ends where the artery continues into the venous portion. In many glomic tumors the elements are not always equally distributed and so Masson divides these tumors into various types, dependent upon the predominance of one of the other elements; that is, epithelioid, angiomatous, neuromatous and degenerative, or cylindromatous.

Dupont also comes to the conclusion that one of the three elements of the neuromyoarterial glomus may predominate over the other, either through the entire tumor or through a portion only of it.

Gay-Prieto has studied the behaviour of the nerve endings in the glomus tumors. He describes an argentophile cell, large globular cell, lying along the course of the non-myelinated nerve bundles and believed to be a differentiated epithelioid cell, similar to neurocrine cells of Berger. A very extensive nerve plexus, located in the walls of the vessels, resembles the corpuscles of Meissner.

Stout, in a very excellent review of these tumors, points out that they were known already, but variously classified as angiosarcoma, perithelioma or

painful subcutaneous tubercles. Geschickter presents also a general review of these tumors and points out the clinical signs and their therapy.

Mackey and Landrum have described also three cases of glomangioma or angioneuromyoma, located in the subcutaneous tissue. The name of painful subcutaneous tubercle practically describes the principal clinical characters of these tumors.

Bergstrand, recently has called attention to the presence of simultaneous glomic tumors in the same individual, present in various locations. He points out the possibility of a deep location near the bony structures. Stout also thinks that cases of multiple tumors are rather rare.

As the study of these tumors progresses, it is evident that their location appears more and more extended. However, their symptomatology can be considered a rather typical one, due to the paroxysmal painful syndrome they provoke.

The case here reported is that of a 36 year old white widow who had enjoyed good health until the onset of her present illness eight years before her examination. At this time she developed a sharp sticking pain under the nail of the left little finger. This pain continued to bother her, in fact grew gradually worse, and then began to radiate up



the inner border of the hand and the ulnar side of the forearm. She had all her teeth removed and later her tonsils as a possible source of infection, but with no improvement. Courses of intravenous medication were also given. The pain finally extended up the arm to the neck and was very severe. She lost weight, became very nervous, and was unable to work as before. Neuro-psychiatric examination had been made with no conclusive findings.

Physical examination was negative except for extreme tenderness over the ulnar nerve behind the internal condyle, and on the nail of the little finger. Here there was a small slightly dark discolored area near the base, comprising about one-fourth of the nail surface, which was very tender. There was no atrophy of the forearm or hand and no loss of sensation.

The patient was referred to Dr. F. R. Teachenor of the University of Kansas School of Medicine for consultation, and his diagnosis was glomic tumor. He recommended removal by extripation or amputation.

Amputation of the distal phalanx was performed, with complete relief of pain after three weeks. The cut of the low power section of the tumor shows its size and location.

The small tumor is formed by numerous collapsed capillaries, lined by endothelial cells. In close contact with the endothelium are numerous large cells of epitheloid aspect and with a cytoplasm markedly acidophilic. They occupy all the spaces between the capillaries and sometimes they are individual cells, while in other instances they appear as forming syncytial masses. The cells have a dark nucleus and a shape which varies from round to polyhedral. Some hyaline substance is present between the cells. Intermingled with these polyhedral cells and more abundant at the periphery of their multistratified layers are seen some spindle cells and some fibrils, which appear in silver stain as neural elements. In some areas there are some doubtful transitional figures between the neural elements and the round or polyhedral cells.

In other sections taken in the vicinity of the tumor, are seen the same glomic normal formation, with small serpiginous capillary or arterioles and myoblastic elements in close contact with tactile bodies.

#### BIBLIOGRAPHY

- Bailey—The cutaneous glomus and its tumor, *American Journal Pathology* 11, 915, 1935.  
 Bergstrand—Multiple glomic tumors, *American Journal Cancer*, 29, 470, 1937.  
 Dupont—Note sur quelques aspects atypiques des tumeurs glomiques, *Bulletin Society fr. d. dermat. et syph.* 42, 1260, 1935.  
 Gay-Prieto—Contribution a' l'Etude des terminaisons nerveuses dans les tumeurs glomiques, *Bulletin Society fr. de dermat. et syph.* 42, 1254, 1935.  
 Geschickter—Glomal tumors interm. cl. 2, 1, 1936.

- Kofler—"Neuromyoarteriell Glomustumor" des Nagelbettes, *Frankfurt. Ztschr. f. Path.* 49, 236, 1936.  
 Mackey-Lendrum—Three cases of glomangioma or angioneuromyoma (painful subcutaneous tubercle), *British Journal Surgery* 24, 208, 1936.  
 Masson—Le glomus neuromyoarteriel des régions tactiles et ses tumeurs, *Lyon Chirurg.* 21, 257, 1924.  
 Masson—Étude sur les glomus, *Arch. per le Scienze Mediche*, 50, 53, 1927.  
 Masson—Les glomus cutanés de l'homme, *Bulletin Society fr. de dermat. et syph.* 42, 1174, 1935.  
 Masson, Gery—Les tumeurs glomiques sous-cutanées en dehors des doigts anigro-neuromyome artériels), *Annals d'An. Path.* 4, 153, 1927.  
 Schoch, Aronson—Glomus tumor, *Texas State Journal Medicine* 32, 545, 1936.  
 Stout—Tumors of the neuro-myoarterial glomus, *American Journal Cancer*, 24, 255, 1935.

## APPENDICITIS ASSOCIATED WITH PREGNANCY

A. W. Feghtly, M. D.

Wichita, Kansas

One of the most, if not the most important factor in the success of every active practicing physician is diagnosis. There are so many diseases, and the differentiation of them is sometimes so difficult, that the success of the physician in handling any given case, depends on the proper recognition. The late Foster M. Johns, of New Orleans, in one of his many contributions to medical and scientific literature made the following very trite statement about diagnosis: "The ability to diagnose disease in general still remains more of an art than a science in many instances, in that when given a particular symptom complex, one must first suspect a particular type of disease process and then endeavor to prove the correctness of the suspicion."

There are many conditions, which we as physicians, have been cautioned to look for, cautioned as to their severity and gravity, and yet many times in the course of quite an extensive practice have never seen, or have overlooked. Such is the association of diseases or conditions shown in the title of this paper. The title has been worded in this manner because the pregnancy is just as much complicated by the appendicitis, as the appendicitis is complicated by the pregnancy. Either condition alone is quite common and comparatively easy to diagnose, but the combination may be quite formidable, and should give the obstetrician as well as the surgeon, much concern. Every medical student is warned of the combination, and every physician, therefore is, or should be, on the alert for such cases, but fortunately they are not common. Having chanced to see two such cases within a weeks time, I became interested in the frequency of this combination of diseases, and took occasion to check up

\*Presented before Sedgwick County Medical Society, October 19, 1937.

on the proper or the accepted way of handling them and further to find out what experience and results had been noted in the literature.

The incidence of this combination of diseases seems to vary a great deal with reports from various sources as is shown by the following replies and findings:

#### Gynecological Reports:

1. Local Obstetrician: 6000 cases pregnancy—One operated case of appendicitis—no abortions—no fatality.

2. Local Obstetrician: 4500 cases pregnancy—no case of appendicitis.

3. Local Obstetrician: Sees two to three cases each year.

4. Oldest general practitioner in this section of country: Cannot recall a single instance of the combination.

5. Garcia of Barcelona: Ninety-four cases appendicitis in 245,854 cases of pregnancy. i.e. 1 in 2300.

#### Surgical Reports:

1. Local Surgeon: Operations for appendicitis complicating pregnancy "quite frequent"—no abortions—no deaths—exact figures not given.

2. Garcia of Barcelona: 501 cases in 36,140 operations for appendicitis—i.e. 1 in 72.

3. Same source: In a single clinic in one year—eighty cases operated for appendicitis, of which two were complicated by pregnancy.

4. Local Surgeon: Cannot quote figures—has had a number of cases—very few with pregnancy interrupted.

The contrast between gynecological and surgical statistics is very noticeable.

In Table 1 some very startling percentages on mortality and abortions or premature births are shown, which are only partially proven by their chart of specific data on 133 cases. As far as shown none of the 133 cases were abscess cases and it is hardly likely that in this number of such cases, no abscess cases were encountered. Likewise in the 115 of these cases marked "incomplete data" it would appear that complete records would have shown some abortions or premature births, even though the mortality shown is very low. These statistics are interesting from the standpoint of contrast with the very comprehensive statistics shown in the Heineck series.

TABLE I

From article by Robert Myer and Wilderson (Germany)  
Mortality

Appendicitis	Without Pregnancy	With Pregnancy	Premature Birth or Abortion
Unperforated	4.6%	30%	13%
Perforated	4.07%	50-80%	50-95%
Abscess cases	11.29%	50-60%	50-60%

Appendicitis Cases	Specific Data on 133 Cases				Deaths
	Month of Pregnancy	6-10	Premature births	Abortion	
Non-perforated	14	5	4	2-43%	1-7.1 %
Perforated	4	3	1	75%	2-50 %
No Data	115				3-2.6 %
Total	133				6-4.5 %

In Table 2 it is interesting to note that the mortality rate in abscess cases is very much less than that for diffuse peritonitis cases. Specific data as regards the incidence of abortion or premature labor in the different classes of cases is not given. Their article particularly stresses that while the mortality of appendicitis in non-pregnant women might conservatively be placed at 5-10%, this rises in pregnant women to 25-30%. Likewise they stress that the prognosis of appendicitis in pregnant women is favorable only when operation is carried out within the first 48 hours. The author computes that the incidence of interruption of pregnancy in or following acute cases at 12% in interval operations at 20%, and in conservative treatment at 24%, showing that early diagnosis and early operation, not only gives a better prognosis as regards the life of the patient, but also vastly improves the chances for the pregnancy to continue, and thus improves the prognosis for the foetus as well as the mother. In the Kleinknecht series of only 7 cases, also shown in this table, an average mortality of 14% and an average incidence of abortion or premature birth of 30% is demonstrated. This is particularly noteworthy because of the variety of cases in such a limited number.

TABLE 2

Schmidt statistics quoted by Pankow			
Cases	Classification	Deaths	%
109	Catarrhal, subsided, & chronic	1	.9
33	Suppurative & peri-appendicitis	4	12.1
74	With diffuse peritonitis	50	67.6
92	Abscess	18	19.6
308	Totals	73	23.7

Kleinknecht report on 7 Cases

2	Simple acute appendicitis		
1	Acute appendicitis with slight peritoneal reaction		
2	Suppurative appendicitis with peritonitis		
1	Gangrenous appendicitis with peritonitis		
1	Gangrenous appendicitis with general peritonitis		
Premature Births—1; Abortions—1 (30%); Deaths—1 (14%); Duration of pregnancy at onset—4 months—1; 5 months—2; 6 months—1; 7 months—3.			

An article by Schumacker of Germany reports an estimated mortality:

From acute appendicitis in non-pregnant women at five to ten per cent.

From acute appendicitis complicating pregnancy at thirty to fifty per cent.

From acute appendicitis with perforation and peritonitis complicating pregnancy at eighty per cent.

His own series of reported cases shows twenty cases of appendicitis during pregnancy operated with the loss of a single case, and this one case being one in which the perforation had been present several days without being recognized. In fairness



to this surgeon we may presume that this patient was not seen early, but only when brought to his clinic for operation.

Maes of New Orleans in an article on this subject makes the following very pertinent statements: "The incidence of abortion and premature labor increases in direct ratio to the seriousness of the disease. . . . Maternal mortality is highest among patients who abort—but abortion is not the primary event responsible for death. . . . Patients are overwhelmed by sepsis and are actually moribund when the foetus is expelled. i.e., they abort because they are dying and do not die because of abortion. . . . Foetal mortality is inevitably high. . . . The patient with recurrent or subacute disease, or the patient who is operated upon promptly in her acute attack, is likely to continue her pregnancy undisturbed, indeed, more likely to do so than the patient in whom operation is deferred."

The next four tables comprise a series of statistics compiled by Aime Paul Heineck of Chicago in an analytical study of all operated cases of appendicitis associated with gestations, intra and extra-uterine, reported in the English, German, and French medical Literature from 1916 to 1926 inclusive. This author has previously published a similar study of 173 cases reported from 1900 to 1915 inclusive.

Table 3 shows first the age incidence, over half the cases being between twenty-one and thirty years and approximately three-fourths between twenty-one and forty years. Next is shown an interesting fact that about one-third of the cases occurred in Para-II pregnancies, and less than ten per cent occurred in primipara. The table showing the period of gestation during which the appendicitis occurred deserves study. An important point is the small number of cases occurring during the first month of gestation. Study of these statistics makes one wonder if the growth of the uterus and the changes superinduced by the pregnant state could be a factor in predisposing of appendiceal trouble or irritation. Further there might be a possibility that the changes in the relative positions of cecum and appendix by the pregnant state could be a factor in predisposing to appendicitis.

Table 4 is merely an analysis of the various

degrees of disease according to a classification chosen by this author. It is noted that of the 405 cases only 77 are shown as "Chronic, without adhesive formation".

TABLE 4  
Heineck Series

Classification	
Acute Catarrhal with or without ulceration	108
Acute Suppurative without abscess formation	3
Acute Suppurative with abscess formation	7
Acute Suppurative with circumscribed suppurative peritonitis	70
Acute Suppurative with diffuse suppurative peritonitis	28
Acute Gangrenous	52
Acute Gangrenous with abscess formation	1
Acute Gangrenous with diffuse peritonitis	1
Acute perforative	5
Acute Perforative with gangrene	3
Acute Appendicitis & Acute Gonorrheal salpingitis & peritonitis	1 279
Chronic with adhesions	14
Chronic without adhesive formation	11
Chronic (No mention made of presence of adhesions)	66 91
Too briefly reported	35
Total	405

Table 5 clearly brings out the importance of early diagnosis, the value of early operation, and the danger of conservative treatment. The large or increased number of cases operated within seventy-two hours might easily lead to the belief that there might be a hesitancy or rather an unwillingness on the part of either the patient or the examiner to admit the severity of the case. This only serves to prove the oft repeated adage of the surgeon that in appendicitis delay is dangerous.

Table 6 shows the operation done. The interesting and astounding fact about this table is that no deaths occurred in the operations of greater magnitude, and that all the deaths occurred in cases in which so called "simple appendectomy" was done. It speaks well for the surgery to note that of the eleven cases of appendectomy+ the proportion of interrupted pregnancy is no greater than in simple appendectomy, and that in the thirty-two cases of appendectomy+ that are shown, no deaths occurred.

TABLE 5  
Heineck Series. Surgical Results.

Time of operation after onset of illness	No. Cases	Maternal Deaths	Pregnancy Interrupted
Within 24 hours	36	3 (8.3% Approx.)	16 (44.4% Approx.)
Within 48 hours	39	1 (2.6% Approx.)	16 (41.0% Approx.)
Within 72 hours	77	26 (33.8% Approx.)	43 (55.9% Approx.)
4th to 6th day	8	1 (12.5% Approx.)	1 (12.5% Approx.)
9th day	2	2 (100% Approx.)	0
10th day	2	0	0
30 days	2	0	0
Total	162	31	69
Not stated	243		
Entire series	405		

TABLE 3 Heineck Series		
Age incidence	Previous Pregnancies	Period of Gestation
15-20 years 46	Primipara 36	1st month 8
21-30 years 207	II-Para 143	2nd month 64
31-40 years 88	III-Para 74	3rd month 83
41-45 years 3	IV-Para 6	4th month 75
46 years 1	V-Para 4	5th month 44
Not stated 60	VI-Para 2	6th month 42
	VIII-Para 2	7th month 23
	IX-Para 1	8th month 25
	Multi-Para 2	9th month 11
	Not Stated 135	10th month 5
		Not stated 25
405	405	405

TABLE 6

Heineck Series. Classification &amp; Surgical Results according to operation.

Uterine Pregnancies	Cases	Deaths	%	Pregnancy Interrupted	%
Appendectomy	371	32	9%	159	42.9%
Appendectomy & Removal of ovarian tumor	3	0		2	67%
Appendectomy & cesarean section	1	0		0	
Appendectomy & vaginal section	1	0		0	
Appendectomy & removal one tube or one tube & ovary	5	0		1	20%
Appendectomy & subtotal hysterectomy	1	0		1	100%
	384	32	8.2%	163	42.5%
Extra-Uterine Pregnancies	Cases	Deaths			
Appendectomy & removal of foetal sac & tube & ovary of same side				20	0
Appendectomy & 7 days later removal of ectopic foetal sac				1	0
Total				405	32

Important comments on the last four tables may be summarized in the following:

There were 373 recoveries from appendicitis.

There were thirty-two maternal deaths; i.e., one case in ten will probably be lost.

There were seventy-one premature labors; i.e., the expulsion of foetus at or after the age of viability. These occurred the day of operation, the day following operation, several days following, or up to four weeks after operation.

There were ninety-two abortions or premature births in which the time varies from twelve hours—two, four, five days, two weeks, and one several days after leaving the hospital. i.e. in four cases out of every ten there will be abortion or premature labor.

In only 205 cases in which despite the appendicitis, the operation, the complications or the sequelae, a living child was born. i.e. On the average only one case in two will probably terminate with a living child.

In 188 cases reference is made to drainage—used in 119—omitted in 69—so presumably no drainage was used in the remainder. i.e. In a given series three cases out of ten will require drainage—again emphasizing the importance of early diagnosis. Early cases seldom rupture, abscess, or develop peritonitis.

No detail is given of post-operative complications, but the statement is made that with few exceptions the cases which survived, had uneventful recovery. The most stormy and severe case aborted on the fourth postoperative day, was in the hospital twelve weeks during which time she had successively: pyelitis on the left side; pyelitis on the right side; phlebitis on the left side; phlebitis in femoral and popliteal veins of the right side; required a second operation; required repeated irrigations of kidney

pelves thru uretral catheters; and finally recovered color, weight, and health after six months.

Table 7 shows comparative statistics in a series of twenty cases gleaned from records of three Wichita hospitals. Total number of appendectomies 4354—i.e. one in 217. The total number of cases is few but in general the statistics agree with the larger series quoted, although the number of cases cited does not agree with the incidence quoted by local men consulted prior to the investigation. The variance may be laid to incomplete records, incomplete case histories, or to failure to report all findings at operation. The local percentage of fatality as well as interruption of pregnancy is quite flattering to local surgery.

TABLE 7

Statistics from Wichita Hospitals

Appendicitis operations Wichita Hospital 1929-1937	1250 cases	7
Appendicitis operations St. Francis Hospital 1931-1937	1854 cases	8
Appendicitis operations Wesley Hospital 1927-1937	1250 cases	5
Foetus lost—3; Maternal deaths—0.		

## Classification

Acute apendicitis	5
Acute appendicitis with abscess	1
Acute appendicitis—6 days post-partum	1
Acute appendicitis—not operated	2
Sub-acute appendicitis	5
Sub-acute appendicitis & ectopic pregnancy	1
Sub-acute appendicitis (retrocecal) with non-viable foetus in utero	1
Chronic obliterative appendicitis & ectopic pregnancy	1
Sub-acute appendicitis (retrocecal)	1
Chronic appendicitis	2 * 20

Age	Incidence	Duration of Pregnancy
17-20 years	5	1 month
21-30 years	9	2 months
30-38 years	6	3 months
Previous Pregnancies		4 months
Primipara	10	5 months
Para II	6	(6 Days Post-Partum
Para-III	1	(Premature Delivery
Not stated	3	Not stated

Statistics quoted show definitely that this combination of diseases is not very common as compared to the number of pregnancies. However the increased percentage of mortality, taken together with the high percentage of interruptions of pregnancy associated with the combination of pregnancy and appendicitis renders its study of great importance to every physician who assumes the care of women during their pregnancy, as well as every surgeon called on for surgical diagnosis or treatment of these cases.

When the non-pregnant woman presents herself to the physician or surgeon with a history of a sudden onset of pain beginning in the epigastrium, later localizing in the right lower quadrant, with or without vomiting, definite tenderness and/or rigidity over, or near McBurney's point, a slight temperature, and a moderate leukocytosis, a diagnosis of appendicitis is not usually difficult, provided of course that it is possible in one way or another to eliminate the many conditions which must be ruled out before a positive diagnosis of appendicitis may be made. These will of course include right sided



pyelitis, right sided ovarian cyst with or without a twisted pedicle, acute exacerbation of a salpingitis, renal colic, acute gall-bladder condition, duodenal ulcer, pleurisy, pneumonia, acute gastritis, or even an intestinal upset from too much or improper food.

However, when the pregnant woman presents herself with a similar train of symptoms the correct diagnosis becomes more difficult. The same line of elimination must be carried out, but the history, study and the findings must also be considered with their reference to other factors peculiar to and resulting from the natural course of pregnancy. These will include:

1. History of other attacks of similar nature.
2. Digestive disturbances associated with the pregnant condition.
3. Possibility of ovarian congestion sometimes seen at what can be computed as a menstrual time and causing discomfort.
4. Possibility of stretching of uterine ligaments.
5. Possibility of uterine fixation, causing tension or tearing of adhesions from former pathological conditions.
6. Elevation of the colon and appendix by reason of increased size of uterus.
7. Size and position of uterus may interfere with reflex rigidity of muscle wall.
8. Pregnancy has a normal leukocytosis of approximately 12,000, therefore it is not unusual to find a leukocytosis of 16-18-22- or 23,500 but the percentage of polymorphonuclears will run as high as 85-92 per cent.
9. Temperature will be slightly higher than in the non-gravid state.

This survey of cases clearly demonstrates the importance of early diagnosis, since the statistics show that the earlier the diagnosis, with operation, the lesser are the chances for interruption of pregnancy or even fatality to occur. Clinical recovery without operation is dangerous because of several factors. The possibility of recurring or later attacks which may be more severe, is a strong argument. Even greater than this is the danger of formation of adhesions or walled off pockets which may be pulled or torn by the enlargement of the uterus, or by uterine activities breaking down encapsulations of an appendiceal abscess, permitting a flare up of the inflammatory process at an inopportune time or even causing generalized peritonitis.

Treatment of these cases, no matter at what period of gestation the attack occurs is essentially immediate operation. For obvious reasons, if no abscess formation or peritoneal invasion has occurred a McBurney incision should be used. The most firm

muscle wall possible must be provided to withstand the continued stretching of the abdominal wall by the growing pregnancy as well as the intermittent strain on abdominal muscles at normal delivery. A proper McBurney incision seems to be less likely to leave a weak wall, predisposing to herniation. However in case of any doubt as to the limitation of the pathology to the appendix alone, the right rectus incision will give larger exposure, permit exploration if it is deemed necessary, and permit freer and more extensive work. Here again should be stressed the importance of thorough or complete diagnosis as well as the necessity for good surgical judgment. Regardless of which is used, closure should be completed with great care, and reinforced to the best of the operators ability in an attempt to leave a solid muscle wall. Nevertheless a ventral hernia in a live patient is much to be preferred to a well healed wound in a dead patient. The operation should be conducted with as little manipulation as possible, and whenever possible drainage should be avoided. When this becomes necessary, adequate drains should be placed carefully and exactly in the places indicated by location of abscess or where drainage will gravitate, but great care must be exercised that they do not come in contact with the uterus. Any mechanical irritation to the uterine body predisposes to uterine activity with threatened abortion. Drains should be removed as early as safely possible. Speed of operation is not as essential as care and judgment. The anesthetics used in the large series cited were varied and included local, splanchnic and local, spinal, and general anesthesia including nitrous oxide, ethylene, chloroform, and ether. That of course is a matter for the judgment of the surgeon. When general anesthesia is chosen, the induction should be slow and careful, with an effort to avoid struggling or wrenching on the part of the patient either going under, or coming out from the anesthesia or during the early post-operative hours. Anesthesia should be complete but not too profound. Pregnant patients are usually quite nervous so a preliminary dose of morphia should be of decided advantage, and sufficient morphine should be used post-operatively to keep the patient quiet and comfortable. A stomach wash before the patient leaves the table or the use of the Levine tube for twenty-four to forty-eight hours might well be utilized to prevent the possibility of post-operative vomiting or straining.

The prognosis in these cases must of course be much more guarded than for the ordinary acute appendicitis attack. The mother as well as the fetus must be considered. The surgeon must think of the possibilities as well as the probabilities of

interruption of pregnancy. Generally speaking the earlier the diagnosis the better the prognosis, and also the earlier the period of gestation, the lesser the chances for interruption of pregnancy or fatality. The more advanced the pregnancy, the lower is the resistance of the patient to infection or toxemia. Necessity for drainage increases the chances for interruption of pregnancy, and of course abortion or premature birth will further decrease resistance and increase danger of fatality.

In the later periods of gestation, tympanites interfere more with respiration, and likewise crowding of the abdominal cavity will increase the chances for obstruction. The crowding of the abdomen also interferes with the free action and migration of the omentum, the policeman of the abdomen, which is thus less able to protect the focal point of infection. Increased vascularity and lymphatic dilatation in the pelvic and appendiceal regions will also decrease the likelihood of encapsulation of free pus or fluid.

### CONCLUSION

In conclusion I have endeavored to show by facts and figures that this combination of diseases or conditions is not very common or frequent, but that it does occur.

2. When it does occur it presents a serious problem which is not always easy to diagnose.

3. When diagnosed, the safest procedure is immediate surgical consultation and immediate operation.

4. Case reports indicate a relatively high mortality for this combination of diseases as compared to the uncomplicated case of appendicitis.

5. As quoted from Dr. Maes, above, abortion or premature birth is a frequent sequela and the mortality is highest among patients who abort, although the abortion is not the primary event responsible for death. The most common cause of death is diffuse peritonitis.

6. Final emphasis should be placed on the statistics shown. In spite of the comparatively happy results shown in local cases and in other statistics it must be remembered that in the larger series it was shown:

Only one case in two will terminate with a living child. One case in ten will result fatally to the mother. Four cases out of ten will have interruption of pregnancy sooner or later. Although to be avoided if at all possible, three cases in ten will require drainage. Finally, early diagnosis with conservative operation produces the safest and the most successful results.

### BIBLIOGRAPHY

- Johns, Foster M.: "Fungus Infections of the Hands and Feet" *New Orleans Medical & Surgical Journal* Volume 81, No. 8 527-32 (February) 1929.
- García, Amo P.: "Appendicitis During Pregnancy", *Rev. Med. de Barcelona* 17: 111-118, 1932.
- Meyer-Wilderson, Robert: "Appendicitis During Pregnancy" *Schweizerische Medizinische Wochenschrift*, 61: 894 (September) 1931.
- Kleinknecht, A. and Tassovatz, S.: "Treatment of Appendicitis during Pregnancy", *Bulletin de la Societe d'obstetrique et de gynecologie*, P. 445, (May) 1933.
- Pankow, O.: "The Causes for the Unfavorable Diagnosis of Appendicitis in Pregnancy and its significance for the Therapy". *Arch. f. Gynak* 133: 5, 1928.
- Schumaker, Paul: "Appendicitis During Pregnancy", *Klinische Wochenschrift*, 8: 1869-72 (October) 1929.
- Maes, Urban Boyce, Frederick, Fitzherbert & McFetridge, Elizabeth M.: "A Surgical Consideration of Appendicitis in Pregnancy", *American Journal of Obstetrics and Gynecology*. 27: 214 (February) 1934.
- Heineck, Aime Paul: "Appendicitis Complicating Pregnancy" *The Medical Herald*, 46: 340-343 (December) 1927 and 47: 4-7 (January) 1928.
- Heineck, Aime Paul: "Appendicitis Complicating Pregnancy", *New Orleans Medical and Surgical Journal*, 80: 436-446 (January) 1928.
- Marbury, W. B.: "Appendicitis in Pregnancy", *American Journal of Surgery*, 19: 437 (March) 1933.
- Culpepper, J. P.: "Appendicitis During Pregnancy", *New Orleans Medical and Surgical Journal*, 87: 370 (December) 1934.
- Puppel, Ernest: "Appendicitis During Pregnancy or Parturition", *Zentralblatt fuer Gynekologie*, 55: 1826 (June 6) 1931.
- Bazala, Vladmimir: "Appendicitis During Pregnancy", *Li jeon. Vjesn.*, 54: 364, 1932.

## INFECTIOUS MONONUCLEOSIS

### TREATMENT WITH SULFANILAMIDE

M. Bernreiter, M. D.

Kansas City, Kansas

Infectious mononucleosis is an acute and to a certain extent contagious disease, characterized clinically by sore throat, enlargement of the lymph nodes; most pronounced in the neck and usually enlargement of the spleen. Hematologically there is a definite increase of the lymphocytes and prolymphocytes and a positive Paul and Bunnell test<sup>3</sup>. There is occasionally severe abdominal pain, the tonsils may be enlarged but the signs of infection and inflammation are characteristically slight compared with a marked glandular enlargement<sup>1</sup>. The disease was first described by Pfeiffer in 1889<sup>2</sup>.

There may be a short preliminary period of malaise, but the onset is usually sudden with fever and sore throat; headache, nausea and chills are not uncommon. The cervical, axillary, inguinal and epitrochlear lymph nodes show enlargement and are sometimes tender.

The typical laboratory findings are a leukocyte count from normal to 30,000 with a few going as high as 50,000. The film shows over eighty per cent of the non-granular type, lymphocytes and atypical monocytes with nuclei that are vacuolated or possess nucleoli<sup>6</sup>. The hemoglobin and red blood count are usually within normal limits. The test for heterophile



antibodies is of much diagnostic value in this disease. The serum of these patients agglutinates sheep cells in a dilution of more than 1:30 and up to 4,000. It is positive in no other disease except serum sickness.

The diagnosis of infectious mononucleosis is based on the history, physical findings, the characteristic blood picture and a positive Paul and Bunnell test (sheep cell agglutination<sup>8,9</sup>.)

Lymphatic leukemia, acute appendicitis and agranulocytosis must be differentiated from infectious mononucleosis. Before the discovery of the Paul and Bunnell test<sup>3</sup> it was often extremely difficult to make a differential diagnosis between infectious mononucleosis and lymphatic leukemia with certainty. However, lymphatic leukemia shows a normal or low agglutination to sheep cells so that with this test the differential diagnosis is usually easy today.

Bunnell<sup>8</sup> employed the sheep cell agglutination test in more than two thousand cases representing seventy-six different clinical conditions. With the exception of serum disease he was unable to demonstrate an appreciable increase in heterophile agglutinins for sheep cells in the serums above the lower dilution of 1:8. There was a consistent increase in all cases of infectious mononucleosis, the titers ranging from 1:64 and 1:4,096.

Infectious mononucleosis is plainly a disease of, but not confined to, childhood. The prognosis is good, all patients recovering within a few weeks to a few months. Several epidemics of infectious mononucleosis have been reported<sup>13,7,14</sup>. Since the prognosis of lymphatic leukemia is so extremely grave the importance of differentiating these diseases is obvious. There is no specific treatment for infectious mononucleosis. Isolation of the patient to prevent the infection of others is certainly advisable. Suppuration of the lymph glands is extremely rare and is probably due to secondary infection. The glands may remain palpable for months.

The importance of studying the blood films in all patients with sore throat is apparent because in addition to infectious mononucleosis and agranulocytosis, lymphatic leukemia, aplastic anemias, diphtheria and scarlet fever may begin with this symptom.

The causative agent of infectious mononucleosis is not known. Many bacteria usually found in lesions of the mouth and throat, as members of the streptococcus group, diphtheroid bacilli and vincent's organisms have at one time or another been incriminated owing to the frequent presence of tonsillitis and oral lesions as an initial symptom of this disease. The most interesting contribution to the etiology of infectious mononucleosis is that of

Nyefeldt<sup>11</sup>, who from three patients having this ailment cultivated three identical bacteria strains, which on injections in rabbits produced a disease resembling human infectious mononucleosis.

In 1926 Mackey and Wakefield<sup>5</sup> reported a case of infectious mononucleosis with jaundice. The patient was first diagnosed as acute cholecystitis and there is no doubt "that many such errors have been made in the past". Their case presents many similarities with the one I am about to describe.

In their discussion Mackey and Wakefield raise this question: "In this patient was the jaundice merely the result of coincident cholecystitis"? If this question is answered in the affirmative then we must assume that in this particular individual an acute infection of the gall bladder invoked the infectious mononucleosis, instead of the usual polymorphonucleosis, and we have left the splenic and general lymph node enlargement to explain. If this question be answered in the negative we have two principal things to consider, namely, is the infectious agent of the glandular fever capable of producing an acute cholecystitis with resulting jaundice or was the jaundice brought about by lymph node enlargement along the common and cystic ducts and obstructing the former. If the latter theory is correct, then we can also explain the asthmatic symptoms in the case I am reporting in this paper by pressure of enlarged lymph nodes against the small bronchi.

The complications in this disease as collected from the literature are usually not serious but Epstein and Dameshek<sup>10</sup> report a case of infectious mononucleosis with striking cerebral symptoms. In this case there was demonstrated parallelism between the cells of the spinal fluid and the white blood cells. Schmidt and Nyefeldt<sup>12</sup> describe five cases of infectious mononucleosis with signs of meningitis on admission.

The treatment of infectious mononucleosis in the past has been symptomatic only and practically all patients have made a complete recovery. The duration of the disease has been variously stated as between two weeks and three months. Swelling of the lymph glands, the characteristic blood picture and a high heterophile blood titer have persisted for months in most cases long after the patient has returned to normal activity.

No case of infectious mononucleosis treated with sulfanilamide has been reported in the literature. I am reporting this case of infectious mononucleosis because sulfanilamide treatment gave quick and permanent relief, and because bronchial asthma, produced by swelling of the broncho-pulmonic lymph nodes, was a complicating factor.

When first seen the patient, age twenty-eight, complained of intestinal cramps, slight nausea but no vomiting; swelling of the neck glands with aching in the eyes and dyspnea. Appetite had been poor. Patient had been constipated. There was a feeling of extreme weakness. At the beginning of this attack a few days ago, patient had fever and slight chills.

Past history was irrelevant except that she had jaundice at the age of six and several attacks of tonsillitis as a child. Had never had asthma.

The family history was not important and no member of the family was affected with the disease at this time.

Examination reveals a fairly well nourished individual. Presents a slight jaundice on inspection. Height: sixty-five inches, Weight: 128 pounds, Temperature: 98.2 degrees, Blood Pressure: 118/60, Pulse: regular, of good quality, ninety-two per minute.

Eyes: Pupils are round, equal in size and contract promptly to light and accommodation. Sclera is slightly icteric. Ocular movements are normal; no signs of exophthalmus and no nystagmus.

Ears: Normal on routine examination.

Nose: Much enlargement of the inferior turbinates on both sides, almost occluding both nasal passages.

Mouth: Teeth in good condition; gums are firm; no bleeding or ulcerations. Tongue is coated and moist. Tonsils are greatly enlarged and signs of follicular tonsillitis are present.

Neck: Visible enlargement of neck glands, most pronounced along the anterior border of the sterno-cleido-mastoid muscle on the left. These glands are tender to pressure but fluctuation is not noticed. Thyroid is soft and not enlarged.

Chest: Well developed. Axillary glands are enlarged, slightly painful to pressure.

Heart: Normal in size with the apex beat within the midclavicular line in the fifth intercostal space. On auscultation rhythm is regular. No murmurs or other pathology.

Lungs: On percussion sounds are normal throughout. The left base moves freely on deep inspiration while the excursion on the right is less pronounced. On auscultation breath sounds are vesicular throughout. No rales. Many wheezes are heard throughout the entire chest (music box chest). Tactile and vocal fremitus are normal and equal on both sides.

Spine: Normal throughout on routine examination.

Abdomen: No unusual findings on inspection. On palpation muscles are well developed, somewhat spastic mostly in the region of the lower left rectus muscle. There is definite tenderness in the epi-

gastrium and over the region of the gall bladder. On percussion tympany throughout the entire abdomen. Liver edge is felt about two fingers below the right rib margin. Gall bladder is not palpable. There is no ascites, no tumor masses. Spleen cannot be definitely palpated but is enlarged on percussion. Inguinal glands are enlarged but not tender to pressure.

Sex organs: Normal on routine examination.

Rectum: Good sphincter tone. No signs of internal or external hemorrhoids.

Extremities: Slight cyanosis of the finger nails. Epitrochlear glands are palpable on both sides. Lower extremities show no varicose veins, no pitting edema. Pulsation of the dorsalis pedis and tibialis posterior plainly felt.

Neurological findings are normal throughout.

Skin: Normal with the exception of yellowish tint throughout.

Investigation of endocrine nature reveals nothing unusual.

Laboratory findings: Blood count: hemo: 80 per cent; c. i.: .9; R. B. C.: 4,390,000; W. B. C.: 11,250; polys. seg. 15; unseg. 13; lympho 52; pro-lympho 11; mono 8; eo 1; reds: Normal in appearance.

Reticulocyte count: .5 per cent.

Bleeding time: 3 minutes.

Coagulation time: 2 minutes.

Cell Volume per cent: 46.

Sedimentation rate: 16 mm. in one hour.

Blood sugar: 85 mgm. per 100 cc of blood.

Urea nitrogen: 12 mgm. per 100 cc of blood.

Cholesterol: 110 mgm. per 100 cc of blood.

Kahn: negative.

Paul-Bunnell test (sheep cell agglutination): 1:1024.

Van den Bergh: Immediate direct reaction.

Icterus index: 13.

B. M. R.: Plus 10 per cent.

Gastric analysis: (fasting) amount 50 cc; appearance normal; Free HCL 24; Total acidity 40.

Urinalysis: reaction acid; sp. grav. 1015; sugar negative; albumen doubtful; urobilin present in normal amounts; bile positive; microsc. eight to ten pus cells per h.p.; occasional granular casts and many calcium oxylate crystals.

Feces: Occult blood negative; microsc. negative.

Diagnosis: Infectious mononucleosis complicated by obstructive jaundice and bronchial asthma.

Treatment: Consisted of bed rest; applications of heat to the epigastrium; fat free diet and magnesium sulphate and glucose intravenously.

Patient is again seen the following day. There



is no improvement in her condition. She complains of extreme perspiration, slight itching throughout the body, extreme weakness and dyspnea.

During the examination patient perspires profusely. Cervical glands are much swollen and tender. The tonsils are greatly enlarged, almost meeting in the center and there is some pus like material deposited in the crypts of both tonsils. Jaundice is more marked and there is no improvement in the asthmatic condition. Temperature 99.2 degrees; Icterus index 15; Blood smear polys seg. 15; unseg. 8; lympho 63; prolympho 9; eo 1; mono 4.

Throat smear is taken and later reported negative for diphtheria and Vincent's organisms. Throat culture is also negative for diphtheria.

Within the next two days patient presents no signs of improvement. She complains of severe pain in the throat, pain in the ears, pain in the epigastrium, restlessness during the night, complete loss of appetite, extreme weakness and dyspnea. The findings on physical examination are the same as above reported.

Patient is now given sulfanilamide fifty gr. the first day, sixty gr. the second day and forty per day thereafter. Prontosil five cc is administered intramuscularly.

The following day patient appears much improved and volunteers the information that she is feeling much better. Soreness in the throat has almost disappeared. Her appetite has returned and she slept well last night.

On examination the cervical glands are still visible; not tender to pressure. Tonsils are still enlarged but the swelling and pus like deposits in the crypts has much decreased. On examination of the chest a few wheezes are heard only at the bases. Jaundice is fading. Temperature 98.8 degrees; W. B. C. 15,000; Blood smear polys seg. 11; unseg. 25; lympho 50; prolympho 10; mono 4.

Treatment as outlined is continued and prontosil is administered intramuscularly.

From hereon patient made a rapid and complete recovery with the return of the blood picture to normal about ten days after administration of sulfanilamide.

#### SUMMARY AND CONCLUSIONS

1. The symptomatology, diagnosis and differential diagnosis of infectious mononucleosis have been reported in detail. A case, representing all the characteristic symptoms and laboratory findings of infectious mononucleosis, complicated by jaundice and bronchial asthma is described.

2. Considering the generalized swelling of lymph glands in infectious mononucleosis, it is believed that

the jaundice and bronchial asthma in the case reported were caused by swelling of lymph nodes around the bile ducts and bronchial tree.

3. Treatment with sulfanilamide in this case produced a rapid recovery with disappearance of all visible lymph nodes, jaundice and asthma. Laboratory findings, including icterus index, Van den Bergh, white blood count, differential count show normal results within ten days after beginning of medication.

#### BIBLIOGRAPHY

1. Tidy: Glandular Fever and Infectious Mononucleosis, *Lancet* 2:205 (July 7) 1923.
2. Pfeiffer E.: Das Druesenfieber, *Jahrbuch fuer Kinderheilkunde* 29:257-265 1889.
3. Paul, John R. and Bunnell, W. W.: The Presence of Heterophile Antibodies in Infectious Mononucleosis, *American Journal of Medical Science*, 183:90-104 January 1932.
4. Turk: *Wiener Clin. Wochensh.* 1907, XX, 157.
5. Mackey and Wakefield: *Annals of Clinical Medicine* 4, 727-730 1926.
6. Eli Lilly & Company: *The anemias* 1938.
7. E. Schulz: Epidemic of Pfeiffer's Glandular Fever, *Muenchener Medizinische Wochenschrift* 80: p. 1890 (Nov. 17) 1933.
8. W. W. Bunnell: Diagnostic Test for Infectious Mononucleosis, *American Journal of Medical Sciences* 186 p. 346 September 1933.
9. H. Lendorff: Seroreaction Valuable for Diagnosis of Glandular Fever. *M. M. W.* 81 p. 447 (March 23) 1934.
10. S. H. Epstein and W. Dameshek: *New England Journal of Medicine* Boston 205: 1238 (December 24) 1931.
11. V. Bie: Infectious Mononucleosis and Agranulocytosis, *Ugeskrift for Laeger, Copenhagen* 96:149 (February 8) 1934.
12. V. Schmidt and A. Nyfeldt: Infectious Mononucleosis and Meningo-Encephalitis. *Ugeskrift for Laeger, Copenhagen* 100:336 (March 24) 1938.
13. K. Scheer: Glandular Fever: Epidemic, *Monatschrift fuer Kinderheilkunde, Leipzig* 48:59 (September) 1930.
14. Clara M. Davis: Acute Glandular Fever of Pfeiffer, (Report of a Nursery Epidemic) *Journal American Medical Association* 92:17 page 1417 (April 27) 1929.

## NEPHRITIC EDEMA

Robert Jeffries, M. D.

Atchison, Kansas

Albuminuria is frequently associated with edema and salt retention. The probable explanation, is that the cause of edema is not to be found in the kidney, it is an extrarenal phenomena. What this extrarenal mechanism is, we do not know. It has been suggested that the edema is not due to the degeneration of the renal tubules. Retention of chlorides is a common accompaniment of edema. However this is not so in every case, for there may be salt retention without edema, and edema without salt retention. It must be thought that the salt retention is due to the failure of the kidney to excrete chlorides, else the blood chlorides would be high, which is not the case. The salt-retaining kidney as a cause of edema is a myth. The chlorides collect in the watery subcutaneous tissue because of some extrarenal factor. The suggestion that water is merely retained in the blood is untenable, for in general anasarca the blood shows no hydremia. In the non-edematous type of nephritis water may pos-

sibly be retained in the blood, even though no hydremia may be demonstrated, whereas in nephritis with edema, the water is held in the tissues, so that the blood actually becomes more concentrated. Under these circumstances, when water is taken in large amounts, it escapes not into the urine, as it ought to do, but into the tissues.

The suggestion that edema is merely a matter of hydration of tissue colloids, that the affinity of the colloids for water depends on acidosis, and that acidosis in turn, is dependent on insufficient oxygenation, does have an appeal as being a very useful hypothesis. Such a theory if correct, would even further suggest, an extrarenal phenomenon for the production of edema. In wet nephritis, the serum albumin is markedly reduced. The normal ratio in the blood (albumin-globulin) is three to one; the reversal of this ratio is emphasized in relation to nephrosis. An albumin solution will exert four times the osmotic pressure of that of a globulin solution of the same strength. Thus it would seem evident that a loss of serum albumin, will hinder the normal return of fluid from the tissue to the blood, and may thus lead to the development of edema. The reversal of the albumin-globulin ratio, experimentally in dogs, will produce a marked edema, an increase in the blood cholesterol, and a low metabolic rate, i.e., the not unsimilar picture of a nephrosis.

Renal edema in contrast to that of cardiac edema, does not involve the serous cavities so frequently. This is a clinical observation, however it again lends support to the supposition that the edema of kidney disease confines its presence to the tissue and tissue spaces. Perhaps the earliest manifestation of a renal disturbance in nephritis, is the inability of the kidney to concentrate the urine. There is usually the passing of copious amounts of urine of low specific gravity. This diuresis is shown clinically by the patient being unable to pass through the night, without being required to empty the bladder on numerous occasions, during the hours of sleep. It may be true that a nephritic patient shows next an early tendency to pass increasing quantities of albumin in the urine, as a compensatory measure, to increase the concentration of the urinary output. I do not believe that the presence of albumin in the urine, is present because of damage to the glomerular tuft primarily, however I do believe this to be one of the very important bits of evidence, showing the power of the kidney to make a functional adjustment to a low urinary concentration. Urine loaded with albumin has a higher specific gravity, disregarding the quantity passed, than does a specimen containing no albumin. On many occasions it has been pointed out as accepted fact, that filtration

of the urine through the glomerulus is a physical process, in which the pressure of the circulating blood is an extremely important factor. In this physical-chemical process, the filtration is rendered more difficult, as by partial or complete occlusion of a large number of the glomeruli. The elevation of the blood pressure, in a measure tends to overcome this difficulty. I do believe that an increase in blood pressure is a good criterion to the presence of actual glomerular tuft damage. That is to say, that the albumin in the urine is the index to the functional alterations that have taken place as a compensatory factor, while the increase in the systemic blood pressure, is on the other hand a good indication as to what one might expect to find as pathological changes demonstrable in the kidney cortex.

The retention of non-protein nitrogen, as evidenced by a rise in blood urea, must be attributed to the glomerular filtration process. It is absent in a pure tubular lesion, such as that of nephrosis. In nephrosis, large quantities of albumin are found. This might suggest that albumin is filtered through the kidney tubule. The kidney tubule secretes, and reabsorbs water, and it would seem quite likely, that the tubule rather than the glomeruli, is most concerned with the filtration of albumin from the blood plasma.

In closing, it may be stated, that such deductions and conclusions herein presented, are likely in a degree to be erroneous. Such grounds for error may spring from a double source. First, the writer realizes he is in no way a research-physiologist, and such information pertinent to the question was selected from the first hand experience of others, better qualified. Secondly, it is always hard to make clinical experiences and realities, conform to the dictates of the mind.

---

Kidneys and Risks of Pregnancy—It is believed that toxemia (accumulation of poisonous substances in the blood) of pregnancy will not develop if the function of the kidney is not impaired.

In stating this belief F. L. McPhail, M.D., Great Falls, Mont., in *The Journal of the American Medical Association* for Nov. 19, describes a method of treatment developed in connection with studies on water balance, acid-base equilibrium, kidney function and shifts in body water. When the burden of fetal (baby) excretion is added without a sufficient increase in fluid intake there may be a retention of urinary waste.

The treatment of mild toxemia is simple and its progress may be averted. The success of the treatment depends on the cooperation of the patient. The taking of fluids is forced. A neutral diet is prescribed. As sodium is a predisposing cause of swelling due to the retention of fluids by the tissues of the body, foods having a low sodium content are chosen, and for the same reason sodium chloride and sodium bicarbonate are eliminated.



## PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

Thanksgiving, an American institution, has come and gone.

With the whole world topsy-turvy, the people of the United States should be truly thankful that we still live in and have the privileges of a democracy.

Only five democracies remain. Can and will the American people withstand the onslaughts of all the "isms" and regimentations being fostered on the world by demagogues and professional politicians? We hope so!

We should hold fast and guard zealously the tenets of a free people bestowed upon us by our forefathers.

The Medical Profession has played no small part in making our country a safer place in which to live.

In no other country today do the people have better medical care and hospital facilities—less than five per cent live farther than thirty miles from a recognized hospital, and in no other country does the relationship between patient and physician exist on such a high plane as in our United States.

For The Kansas Medical Society, may we express our thanks to the chairmen and the members of the various committees for their time and effort and for the splendid work they are doing. Also to the entire membership for their interest and cooperation—to all of you and yours a Merry Christmas.

N. E. MELENCAMP, M. D., President.

---



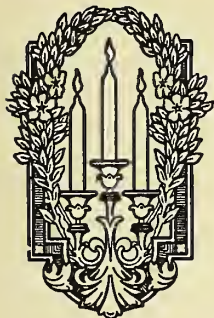
---

## EDITORIAL

---



---



### The Journal

extends to its  
readers best  
wishes for a  
Very Merry  
Christmas

### EDUCATION NEEDED

Doctor Herbert L. Lombard, in an article entitled "Education A Major Need In Adequate Medical Care," published in a recent issue of the Journal of the American Medical Association, expressed the opinion that if the economic structure of society were such that all could afford to pay for adequate medical care, many would not get it because of the lack of proper public education.

Doctor Lombard's article is based on figures obtained from the Massachusetts survey of chronic diseases and the cancer program. One of the points of interest in these studies is that approximately twenty per cent of persons between the ages of forty and fifty are affected with chronic diseases. It is Doctor Lombard's opinion that if the age of onset of chronic disease could be extended to beyond sixty years the twenty years increase in the span of health would mean increased working efficiency, lower cost of sickness and improved general well-being of the individual.

Experience in the Massachusetts Cancer program of intensive public education over a period of three and one-half years, demonstrated that the dissemination of information produces results and that a sustained publicity campaign is the answer to the problem of chronic disease.

Doctor Lombard's article does not discuss the factors entering into the question of adequate medical care. The training of the man who first sees the chronic case, a cancer patient for instance, is usually the determining factor as to whether the patient is

to receive adequate care. The general practitioner in most instances is the man who makes this contact. If he at once refers the case to a man or group fully equipped and experienced in the diagnosis and treatment suited to his needs. If the case is overlooked or inadequately treated the patient's opportunity for the arrest or cure of cancer is lost.

Cancer patients or victims of other chronic diseases cannot be expected to seek experts when their symptoms lead them to consult a physician. Ethical publicity methods cannot recommend certain men of clinical groups.

The medical profession has learned how to educate the public and enough work has been done to show the immense social value that may be expected if such educational methods are carried forward in a sustained and nation wide endeavor. The next imperative step is to organize and train more doctors in the technique of recognizing and treating all chronic diseases and the development of plans to place the patients under the care of those equipped to render adequate service.

It is the medical profession's responsibility to educate the public and to meet the demands which this creates by wide spread organization and improvement in facilities for diagnosis and treatment.  
—R. B. S.

---

### COUNTY SOCIETY OFFICERS

During the next 30 days, many of the county medical societies will hold their annual election of officers. In our opinion, this is one occasion, above all others, in which every member of every county society should participate.

It seems to us as if events which are taking place should have convinced the medical profession that it needs to be well-organized and united. Good organization can only be accomplished through good leadership.

There was a time when the chief qualifications a man had to possess in order to be eligible for the presidency of his local medical society were: Professional standing, a congenial personality and a few gray hairs. Times have changed. Today, the president of a medical society must be an organizer; a leader; a student of the economic, social and legislative prob-

\* Ramsey, G. H.; American Journal of Hygiene, 1938, Volume 21, Page 665.



lems confronting the profession; a man with wide and varied public contacts; one who is tolerant and receptive to ideas and suggestions, yet a physician who is unwilling to play fast and loose with principles and fundamental policies; a man of broad vision and with a progressive, yet sound, attitude who refuses to be stampeded but is willing to be shown.

Is there a man in your society who can measure up to these qualifications—or the more important of them? If so, elect him president for the ensuing year. You will need leadership of this kind.

Does your county society secretary possess some of these fundamental qualifications and has he been doing his job well? If so, re-elect him. If not, replace him with a man who measures up. The idea that the secretaryship of a county medical society is something to be passed around periodically is, in our opinion, bunk, as well as bad procedure. If you have a good secretary, keep him; help him. Why change horses in the middle of a stream, especially if the critter has the pep and endurance to get to shore and keep on going after he arrives?

Has your legislative committeeman or heads of your other important committees been on the job and doing good work? If so, keep them on the job. If not, give other members a chance to see what they can do.

The individual members of each county medical society are the ones who should decide these questions. As individuals, physicians will get no place in a hurry when it comes to battling social, economic and legislative problems. As a unit under good management, they can cut quite a figure. This has been demonstrated in the past and will be demonstrated in the future.

On the day when your county medical society meets to elect its officers and committeemen for 1939, you should be there and you should have in mind some of the points which we have raised. Medical organization needs hard-hitters in the saddle.

No physician who takes pride in having professional standing and believes there is safety in numbers and concerted action can afford not to be a member of his local and state medical societies. Don't let your membership lapse. Pay your 1939 dues now. —The Ohio State Medical Journal, December, 1938.

## THE TREATMENT OF TUBERCULOSIS

The most satisfactory method of controlling any disease is prophylaxis. Active immunization early in life by artificial means represents the last word in efficient therapeutics. Experience has shown us that such a procedure is successful in smallpox, diphtheria, and typhoid. By the harmless technique of immunization, the patient is for all time protected against diseases which were once among the most dreaded scourges of mankind.

Next in efficiency among our therapeutic procedures is the specific treatment of certain diseases. Medical annals have no better example of this treatment than the recently perfected serum for pneumonia. Here a specific therapeutic agent, prepared for the treatment of a specific disease that is caused by a particular organism, is the ideal method of treating the disease once the body has been invaded. The rush of anti-serum to a pneumonia patient or of antitoxin to a child with diphtheria is the daily task of the physician, the dramatic value of which is not exceeded by the most lofty speculations in fiction.

Other methods of treatment deviate from the ideal in various ways. The removal of an acute appendix followed by satisfactory and uneventful recovery of the patient may be considered the ideal in surgical treatment. From this point therapeutic procedures vary greatly in effectiveness. Generally speaking, the more methods there are of treatment the less effective is the therapy.

From immunization and specific therapy we pass to relative therapy which if not successful in curing is directed to the control of the disease, and while the patient is not freed from the pathology, the pathology may be arrested. Such are our present methods of treating conditions such as pernicious anemia, diabetes, heart disease, and tuberculosis.

One of the most effective examples of relative therapeutics and public health has been the marked decrease in the death rate of tuberculosis in the absence of a specific treatment. Many things have contributed to this decline in the mortality. The isolation of patients in sanatoria and hospitals, the general increase in the knowledge concerning the communicability of the disease, improvements in sanitation and hygiene for those who are cared for in pri-

vate homes, the general use of rest as a method of treatment, and more recently the extensive application of collapse therapy to diseased lungs have made possible the control and frequently the arrest of tuberculous disease which hitherto was inevitably progressive.

This apparent success, however, does not offer a very satisfactory opportunity for the physicians to point with pride toward their accomplishments. The fact remains that at this time we possess no satisfactory method of prophylaxis and certainly no accepted specific treatment. Everything that is done in treating tuberculosis is a palliative procedure. Isolation of the patient is a palliative procedure. Rest is not a method of treatment recommended for tuberculosis alone but is the most satisfactory method of putting the patient in a favorable condition to heal his own disease. Isolation and hospitalization over a period of months and frequently years certainly leaves much to be desired in the treatment or control of any disease. The surgical procedures extending from pneumo-thorax to the more radical methods of thoracoplasty are themselves palliative and designed to attempt to effect control of the disease. If the patient is to obtain a cure resulting from his own resistance to the infection it will be accomplished only after months and years of patient and consistent effort. Lacking a specific treatment we try to help the patient to help himself.

It hardly need be pointed out that satisfactory methods of treatment of the infectious diseases that have been brought under control have been the results of physiological, bacteriological, and chemical studies. To date these studies have not given us the ideal treatment for tuberculosis, but we have not studied the disease so long that we should be discouraged. There are physicians still living who were in practice when the tubercle bacillus was discovered. It would seem appropriate that we should dedicate ourselves anew to long, diligent, and profound studies in the chemistry, bacteriology, and the physiology of this disease with the firm confidence that some time, some day, a specific cure will be discovered which will place tuberculosis alongside diphtheria, typhoid, and pneumonia.—Indiana State Medical Journal, November, 1938.

---

## CANCER CONTROL

---

### CARCINOMA OF THE VULVA, VAGINA AND CERVIX

R. A. West, M. D.

Wichita, Kansas

#### CARCINOMA OF THE VULVA

##### Frequency

In 1922, Mattmueller and Labhardt<sup>22</sup> reported carcinoma of the vulva occurring in 3.2 per cent of 620 cases of genital cancer. Tauch<sup>24</sup> gives the relative frequency of vulvar cancer to uterine cancer as one to twenty.

##### Classification

The most satisfactory classification is probably that of Taussig<sup>28</sup> which is as follows:

1. Epidermal cancer is the most common form. Taussig<sup>25</sup> reports fifty-one out of sixty-seven cases springing from labial, perineal, or preputial skin and is regarded as relatively speaking not very malignant.

2. Cancer of the glands clitoridis is very rare. Metastasizes very early and practically always fatal.

3. Vestibular cancer. These usually occur in the tissue around the urethral orifice or very commonly from around the site of an old syphilitic lesion. They are clinically characterized as very malignant. Histologically they may be either squamous cell or glandular in type.

##### Etiology

Most authorities agree that leukoplakic vulvitis is the most common cause—then old luetic lesions, chronic bartholinitis, acuminate warts, kraurosis vulvae, and trauma, with a large percentage of cases having undetermined cause.

##### Clinical Course

There are the inverting and everting types. The former early penetrates the sub-dermal tissue and forms a nodular ulcer with a shallow crater. The everting type assuming a cauliflower-like growth extending over the skin of the vulva and often contact implants on the opposite surface. In bartholin, as well as clitoris cancers, however, the lesion starts as a subdermal tumor. These cancers are characterized clinically by late invasion of the deeper structures such as subcutaneous tissue, bone, and periosteum and very early invasion of the tributary lymph glands.

Little need be said in regard to the differential diagnosis of these lesions because all suspicious ulcerative areas or nodules should be at once sub-



jected to biopsy. The diagnosis, however, usually presents no difficulty grossly if one remembers the characteristic rolled borders and infiltrated area around the lesion. Also the fact that areas around tertiary ulcers which show increased friability and tendency to bleed are apt to be cancerous.

#### Treatment

The treatment of carcinoma of the vulva may be roughly divided into three groups.

1. Palliative. 2. Surgical. 3. Irradiation.

Depending of course upon the age and general condition of the patient and the extent of the disease.

In cases which have progressed beyond hope of cure, sedation with soothing lotions or ointments, together with electro-coagulation of the ulcer surface is practically all that can be offered the patient.

Most writers agree that surgery in most cases offers the best hope of cure, employing the same surgical principles as in carcinoma of the breast, lip, etc., i.e., a wide excision of the skin, together with the tributary lymph glands, keeping in mind that in cases arising from leukoplakia of the vulva, all of the leukoplakic area should be removed. Space will not permit a detailed discussion of the surgical technic. Some operators content themselves with wide excision of the lesion with a dissection of only the superficial lymph gland. Others advise a complete dissection by combined abdominal and inguinal operation of the iliac, deep inguinal, together with the superficial lymph glands. A happy medium between these two extremes is found in the Bassett operation, as modified by Taussig,<sup>25</sup> in which the lesion is excised by means of the electric knife, and inguinal and femoral glands are dissected. In recent years, irradiation therapy has been gaining favor. Many cases have been best treated by a combination of irradiation and surgery and many cases by irradiation alone. One method<sup>4,5,1</sup> may be to implant small radium needles (two mgm) throughout the base of the lesion, spaced one cm apart and giving a total dose of 2,000 to 4,500 mgm hours. These needles should have a wall thickness of 0.5 mm of platinum or its equivalent. Deep high filtered roentgen rays by the protracted small dose method, should be given to the groins.

Moderately advanced lesions can be treated by destroying the local lesion with electrocoagulation and intensive radium and roentgen therapy employed both internally and externally to the pelvis.

Far advanced cases are only palliatively treated by roentgen rays and radium.

Sarcoma of the vulva may be treated in a similar way to carcinoma, although the percentage of cures are less than those of carcinoma.<sup>3</sup>

### CARCINOMA OF THE VAGINA

It has been estimated that about 0.2 per cent of all genital cancers have their origin in the vagina.<sup>28</sup>

About fifty-four per cent have their origin on the posterior wall, eighteen per cent on the anterior wall and ten per cent on the lateral walls.

#### Etiology

The most important known etiologic factor is that of leukoplakia as stressed recently by Hinselmann.<sup>30</sup> It is important to note that the factors of irritation, infection, and childbearing are not predisposing factors as is the case in carcinoma of the cervix.

#### Clinical Characteristics

Primary carcinoma of the vagina may appear in the form of a crater like ulcer with irregular edges and superficial infiltration or a cauliflower-like growth, i.e., the papillary form. The majority are squamous cell in type, but occasionally a true adenocarcinoma is found. The lesion usually spreads by continuity, although contact growths are occasionally found on the opposite wall. They usually extend upward toward the cervix rather than downward toward the vulva. They are characterized by early involvement of surrounding structures and regional lymph glands. Metastasis occurs as early as three months.

#### Symptomatology

The symptoms are vaginal discharge, bleeding, following douching or intercourse, and later pain, with bladder or rectal symptoms when involvement of these structures occur.

#### Diagnosis

The diagnosis is usually made without difficulty, but is always confirmed by biopsy.

#### Treatment

Many surgical procedures have been devised, which aim at extirpation of the genital tract, but unfortunately have rarely proved successful. Von Buben<sup>8</sup> estimates ninety per cent recurrence, while Ewing<sup>6</sup> states that no definite operative cure of the established disease seems to be reported. The results from radiation therapy are far from glowing, and of little more curative value than surgery. The therapeutic measures may be those of placing small radium needles in the base of the lesion similar to that of carcinoma of the vulva, but in this instance the dosage must be carefully controlled because of the danger of proctitis or recto-vaginal fistula. The local therapy should be followed by intensive deep high filtered protracted small dose roentgen rays to the entire pelvis.

### CARCINOMA OF THE CERVIX

Carcinoma of the cervix is by far the most common of all malignancies of the female genital tract. The

average incidence as compared to the body of the uterus is usually regarded as about eight to one.<sup>2</sup>

**Etiology**

The greatest factor predisposing to cancer of the cervix is chronic irritation caused by traumatism, or by infection. This is directly the reverse of cancer of the vulva or vagina in which sites neither infection nor trauma seem to play an important part, with the exception of old luetic lesions of the vulva.

That child bearing is an important factor in the predisposition of the disease is a well recognized fact. Macfarlane<sup>1</sup> found that carcinoma of the cervix occurs three times more frequently in the multiparous than in nulliparous women.

Authorities have long since agreed that cervicitis, arising either from infection or traumatism, with its resultant leukorrhea is practically always the foundation upon which cancer of the cervix develops.<sup>11</sup>

With this fact in mind, the problem of cancer of the cervix is placed quite definitely in the hands of the family physician who has the opportunity to see cervicitis and leukorrhea in its early stages, and has in his hands a simple means of eradicating this chronic irritation of the cervix by means of electric cauterization or coagulation, thereby eliminating the outstanding predisposing cause of carcinoma.

So until we have increased knowledge in the therapeutics of this disease which will permit us to cure more than thirty per cent of the cases, any marked decrease in mortality will undoubtedly have to come from prophylactic rather than therapeutic measures. And I repeat that this is a field in which the family physician can be of inestimable value to the people of his community.

#### Diagnosis

Space in this paper is too limited to permit discussion of the diagnosis of frank cases where a large cauliflower mass or a deep ulcerative crater is found. It should be remembered that a diagnosis of any value to the patient must be an early one.

For the early diagnosis of carcinoma of the cervix there are necessary only three things, i.e., a good lighted vaginal speculum, the Schiller test, and the services of a good pathological laboratory. The colposcope is being much talked of at present, and is a valuable aid but probably offers little advantage over a good artificial light, such as can be obtained from a head mirror.

The Schiller test is more valuable in the fact that it shows very definitely the areas on the squamous epithelium which are defective in glycogen, i.e., leukoplakic areas which are the areas to be selected for biopsy. A well trained pathologist is absolutely indispensable in this work, because a general practitioner, surgeon, or gynecologist, without special

training in pathology can not have the knowledge to pass on early or borderline cases, which as stated previously, are the only ones which can be offered a good chance of recovery.

Generally speaking, there are five groups of cervices which should always be regarded with enough suspicion to be subjected to biopsy.

1. One which produces a thin serous discharge.

2. One that shows an area of erosion which fails to heal in two to three weeks following electric cautery or coagulation.

3. One which to the tactile sense shows irregular areas of induration.

4. One which bleeds from the external os following the application of a cotton swab.

5. Any cervix which shows leukoplakic areas following Schiller test.

#### Treatment

During the past ten years the trend of treatment has been constantly turning from surgery to irradiation therapy until at the present time the question is not whether to employ surgical or irradiation therapy or both, but whether surgery is ever indicated in the treatment of carcinoma of the cervix.

The only cases which are ever cured by surgery are those treated by the Wertheim or Schauta technic, and to be successful they must be early cases which, on the other hand, are offered as good a chance for recovery by radium and x-ray. So in view of the twelve to fourteen per cent primary mortality occurring in radical operations, very little place is left for surgery in the treatment of this disease.

Radium was first used in treatment of carcinoma of the cervix in 1904 by Abbe,<sup>17</sup> of New York. The real development of the method was done by the French beginning in 1913. World wide recognition of the value of the element followed rapidly and it was adopted in all civilized countries.

Roentgen rays began to become used as a therapeutic agent upon the development of high voltage apparatus, heavy metal filters and depth dose measurements. It was in 1916 that Friedrich<sup>17</sup> published his first equal intensity curves for the delivery of known amounts of roentgen rays into deeper parts of the body, and from this technics were established by cross fire method to deliver lethal amounts to the parametrial structures in extensive cervical carcinoma. The latest work to develop a scientific chart method of delivering a lethal radiation dose by various technics is that of Arneson<sup>9</sup> in which he shows by zones the areas in the pelvis where roentgen rays and radium deliver their respective doses.



The first approach to the radiation problem of carcinoma of the cervix is to establish as near as possible the actual extent of the lesion and estimate in centimeters the spread of the primary lesion outside of the cervical boundary. Next, by careful history and examination determine whether the spread involves the rectum, bladder, or ureters. Any involvement of these structures alters the prognosis. Next a careful pathological appraisal of the tumor tissue should be done by a biopsy, because the degree of anaplasia is a fair index to the prognosis;<sup>12</sup> the more immature the cells, the better the prognosis, because of the high radiosensitivity of the tumor. The practical points in prognosis without going into complicated classifications are (a) prognosis is good no matter what degree of malignancy of the primary tumor if the cervical boundaries have not been crossed, (b) prognosis decreases markedly as the degree of invasion progresses outside of the cervical boundary but hope can be held out longer for a cure in those cases where the cells are in their highest degree of undifferentiation. (c) Prognosis is very poor where the ureters, bladder or rectum are involved.

#### Technic

The space allotted will not permit a discussion of each method employed by the various workers,<sup>14, 15, 10, 20, 21, 18, 19, 17, 16</sup> nor would it be practical in many instances, because of the excessive cost of equipment and the lack of available radium in large quantities. In order to close this subject with brevity, dogmatism must enter into the method of treatment. Bear in mind, however, that each patient presents her own problem and no general therapeutic method will apply to all cases. The treatment is divided into two phases; (a) roentgen rays, and (b) radium implantation.

(a) Roentgen rays in the writer's opinion should be employed first for definite reasons:

1. Any infection in the cervical tumor will be cleared up, thus lessening or eliminating this danger when radium is applied.
2. The discharge and bleeding are stopped thus making the patient better able physically to tolerate the radium application.
3. The tumor mass will shrink in size, and the original lesion can often be better outlined and treated by radium. The cervical canal cannot be found in large tumors, but after roentgen irradiation, the true extent of the lesion may be determined and the cervical canal found.

The method of treatment consists of six ports encircling the pelvis with a minimum of 1500 r units to each port. The daily treatment should be 200 r units given to each of two opposite ports,

employing deep (200 kvp) high filtered roentgen rays. After waiting six weeks the patient is re-examined and the extent of the lesion redetermined. When this has been appraised the method of employing the radium and the distribution can be worked out.

(b) Radium implantation should be accomplished with some attempt at cross firing through the lesion if this is possible. Almost all technics involve primarily the placing of radium in the cervical canal. Large amounts of radium placed here will not administer a lethal dose to parametrical extension of the tumor and will only cause extensive necrosis of the normal tissues of the cervix.<sup>9</sup> A good method is to use a tandem applicator with a filtration at least equivalent to 1.0 mm platinum; the upper container placed just above the internal os and administering 1000 mg. hours, the lower container placed in the cervical canal and administering 2000 mg. hours.

The cross firing may be accomplished briefly, by (a) a colpostat or spool placing 1000 mg. hours in each lateral fornix, or (b) long radium needles placed clockwise in the lateral cervical tissues and using 1000 to 2000 mg. hours. Some observers place a plaque, or bomb, or container over the cervix which gives an added 1500 mg. hours.<sup>14</sup>

In conclusion, this brief survey of the therapeutic principles in carcinoma of the cervix is admittedly very inadequate because each case is individual. However, if roentgen rays are employed first, a complicated problem may often be rendered simple. Too much stress cannot be placed on the dangers of radium implantation in disturbing the rectum, bladder, or causing erosion of the vaginal tissues. The prognosis should be guarded if the bladder, rectum or ureters are suspiciously involved. Debilitated patients with a low hemoglobin and red cell count are poor risks and do not tolerate treatment well. Finally, the best results are going to be obtained when the surgeon and radiologist work hand in hand by pooling their knowledge.

#### BIBLIOGRAPHY

1. Friedman, M.: American Journal Roentgenology and Radium Therapy 28, 521, 1932.
2. Graves, W. P.: Gynecology, W. B. Saunders Company 1928.
3. Healy, W. P.: American Journal of Obstetrics and Gynecology 26, 789, 1933.
4. Pohle, E. A.: Clinical Roentgen Therapy, Lea & Febiger Company 1938.
5. Rentschler, C. B.: Annals of Surgery 89, 709, 1929.
6. Ewing, J.: Neoplastic Diseases, W. B. Saunders Company, 1928.
7. Graves, W. P.: Gynecology, W. B. Saunders Company, 1928.
8. Pohle, E. A.: Clinical Roentgen Therapy, Lea & Febiger, 1938.
9. Arneson, A. N.: Radiology 27, 1, 1936.
10. Arneson, A. N. and Quincy, E. H.: Radiology 25, 182, 1935.
11. Curtis, A. H.: Surgery, Gynecology and Obstetrics, 56, 1052, 1933.
12. Graves, W. P.: Gynecology, W. B. Saunders Company, 1928.
13. Idem: Surgery, Gynecology and Obstetrics, 56, 317, 1933.

14. Healy, W. P.: American Journal of Obstetrics and Gynecology, 26, 789, 1933.
15. Idem: American Journal of Obstetrics and Gynecology, 29, 370, 1935.
16. Morton, D. G.: American Journal Roentgen and Radium Therapy, 29, 487, 1933.
17. Pohle, E. A.: Clinical Roentgen and Radium Therapy 29, 487, 1933.
18. Schmitz, H.: Radiology, 17, 1230, 1931.
19. Idem: Radiology, 21, 311, 1933.
20. Ward, G. G. and Farrar, L. K. P.: Journal of American Medical Association, 91, 296, 1928.
21. Ward, G. G. and Sackett, N. B.: Surgery, Gynecology and Obstetrics, 60, 495, 1935.
22. Mattmueller, G. Zeitschr. f. Geb. u. Gyn., 84: 106, 1922.
23. Labhardt: Holban-Seitz, Biologic um. Pathologic den. Weiber. 3: 1195-1260, 1924.
24. Tausch, M., Monatschr. f. Gen. u. Gyn., 89: 402-419, 1931.
25. Taussig: American Journal Obstetrics and Gynecology, 18: 472-504, 1929.
26. Smith and Graves: Journal of American Medical Association, 92: 1244-1252; 1929.
27. Bassett, Rev. de Chirurgie; 32: 546-570, 1912.
28. Curtis: Obstetrics and Gynecology, Vol. 3; page 603-613.
29. Schlundt: Inaug. Diss., Greiburg; 1. Br., 1913.
30. Hinselmann, H. Zeitschr. f. Geb. u. Gyn., 1931, 101; 142-183.

---

## EYE, EAR, NOSE & THROAT

---

### OBSERVATIONS ON THE ACTION OF PAREDRIINE HYDROBROMIDE OPHTHALMIC SOLUTION

#### USED ALONE IN THE PRODUCTION OF MYDRIASIS\*

Lyle S. Powell, M. D.

Lawrence, Kansas

and

Marshall E. Hyde, M. D.,

Osawatomie, Kansas

This report deals with one of a series of studies being conducted at the Osawatomie State Hospital on cycloplegia and the effect of various drugs used for the production of cycloplegia and mydriasis. Previous reports record the action of homatropine and benzedrine in combination,<sup>1,3</sup> the action of eserine on the cycloplegia produced by homatropine and benzedrine in combination,<sup>2,3</sup> and the effect of benzedrine sulphate ophthalmic solution used alone in the production of mydriasis.<sup>4</sup> This report is submitted on the action of paredrine hydrobromide† one per cent solution used alone in the production of mydriasis before ophthalmoscopic examination of the fundus.

Paredrine is the parahydroxy derivative of benzedrine. Pharmacologically the two compounds be-

have similarly with respect to their peripheral action. It is said that paredrine has a much less stimulating effect upon the central nervous system. It seems, however, that this difference in effect may be disregarded from an ophthalmological standpoint due to the extremely small dosage administered in the conjunctival sac for the production of mydriasis or as an adjuvant or synergist to a cycloplegic drug.

#### PROBLEM

To observe and record the degree and duration of mydriasis resulting from the administration of paredrine hydrobromide one per cent solution (three per cent boric acid).

#### MATERIALS USED

1. Ten patients between the ages of sixteen and thirty years.
2. Ten patients between the ages of fifty and seventy years.
3. Millimeter ruler.
4. Jaeger test type.
5. Flashlight.
6. Prince rule.
7. McLean tonometer.
8. Pontocain one-quarter per cent solution.
9. Solution of paredrine hydrobromide one per cent (three per cent boric acid).
10. Eserine salicylate one-half per cent tear isotonic solution.

#### PROCEDURE

The usual routine observations were made at time intervals indicated and the observations include:

1. Visual acuity.
2. Reaction of the pupil to light.
3. Ability of patient to read Jaeger test type.
4. Size of the pupil in millimeters.
5. Accommodation as determined by Prince rule.
6. Intra-ocular tension (McLean).

Technique of drug administration: Paredrine hydrobromide one per cent (three per cent boric acid) solution gtt. two were instilled in each eye of each patient included in the group studied every five minutes until four doses were administered. For example, Group A received paredrine gtt. two in each eye at 1:30, 1:35, 1:40 and 1:45. The previously mentioned observations were made and recorded prior to drug administration and one-half hour, one hour, two hours, and four hours following drug administration.

#### RESULTS

Group A. Observations on the age group sixteen to thirty years:

1. On the size of the pupil: A definite moderate to marked increase (two to four m.m.) in the size

\*From the Department of Ophthalmology, Osawatomie State Hospital, Osawatomie, Kansas.

†Smith, Kline and French Co., Philadelphia, Pa.



of the pupil occurred in all patients as early as one-half hour following drug administration and was present at the one hour and two hour intervals, but subsided or decreased by one or two m.m. in all patients in this age group at the end of the four-hour interval.

2. On the reaction of the pupil to light: The pupils were uniformly inactive at the one-half hour, one hour, and two hour intervals. At the four hour interval beginning pupillary reaction to light was observed.

3. On the ability to read Jaeger test type: The ability of this group to read Jaeger test type was not affected by drug administration made during this study.

4. On the changes in the Prince rule readings: A definite slight to moderate, consistent decrease of accommodation as determined by the Prince rule readings resulted in this group. This amounted usually to one or two diopters. While this was a slight variation, it was nevertheless definite and indicated a slight cycloplegic effect not found with some other mydriatic drugs. This change persisted thruout the one-half hour, one hour, and two hour interval but had practically or completely subsided at the end of the four hour interval.

5. On the changes in intra-ocular tension: No definite change or trend in intraocular tension following paredrine one per cent solution administration was observed in this age group.

6. Eserine salicylate one per cent tear isotonic solution overcame this mydriasis within one-half hour.

Group B. On patients between fifty and seventy years of age.

1. On the size of the pupils: Uniform dilatation of the pupil occurred in the entire group, maximum dilatation being reached one-half hour following drug administration. There was a definite but slight decrease in the size of the pupil at the end of four hours.

2. On the reaction of the pupil to light: Pupils were uniformly inactive at the one-half hour, one hour and two hour intervals. There was partial or complete return of reaction to light of the pupils at the end of four hours.

3. On the ability to read Jaeger test type: Patients who could read any of the Jaeger test type showed a moderate but definite and appreciable decrease in the ability to read Jaeger test type. This amounted usually to a change of three or four steps at the most. That is, the patient who could read J3 would be able to read J7 or better following drug administration.

4. On the changes in intra-ocular tension: The majority of patients exhibited a slight decrease of intra-ocular tension. This change was not considered significant.

5. The mydriasis was overcome within one-half hour by the administration of eserine salicylate one-half per cent tear isotonic solution.

## SUMMARY

Paredrine hydrobromide one per cent solution produced a uniform increase in the size of the pupils amounting to two millimeters or more in a group of patients between sixteen and thirty years of age, and in another group of patients between fifty and seventy years of age. This mydriasis showed a tendency to subside four hours following drug administration in both groups. There was observed a slight but definite tendency toward a decrease in accommodation in both groups during the mydriasis.

## CONCLUSIONS

Paredrine hydrobromide solution one per cent produced definite mydriasis in both old and young people. This mydriasis showed a tendency to subside at the end of four hours. No significant changes in intraocular tension were observed. A definite slight transient decrease in accommodation occurred. The mydriasis was quickly overcome by the administration of eserine salicylate one-half per cent tear isotonic solution.

## BIBLIOGRAPHY

1. Powell, Lyle S. and Hyde, M. E.: The Effect of Benzedrine Sulfate Solution on Cycloplegia, *Journal Kansas Medical Society*, January 1938, 39:1:1-4.
2. Powell, Lyle S. and Hyde, M. E.: Observations on Action of Eserine Administration During Homatropine-Benzedrine Cycloplegia, *Journal Kansas Medical Society*, February, 1938, 39:2:57-59.
3. Powell, Lyle S.: The Practical Use of Homatropine-Benzedrine Cycloplegia, A Further Report, *Transactions American Academy of Ophthalmology and Otolaryngology*, 1938.
4. Powell, Lyle S. and Hyde, M. E.: Observations on the Action of Benzedrine Sulfate Ophthalmic Solution Used Alone in the Production of Mydriasis, *Journal Kansas Medical Society*, October 1938, 39:10:434-5.

Electrical Shock—Dr. Kormoczi, senior physician to and for thirty years in the service of the Budapest Ambulance Society, says that to resuscitate a patient following an electrical accident first aid should be given on the spot by the immediate application of artificial respiration. *The Journal of the American Medical Association* for Dec. 3 reports from its regular Budapest correspondent. Professor Jellinek, lecturer on electrical accidents, protested against the belief of some physicians that a period of from five to eight minutes between the cessation of respiration and the commencement of artificial respiration is of no special importance. In Kormoczi's experience the very first minutes are most important and decisive. Artificial respiration should be applied in every instance.

---



---

## MEDICAL ECONOMICS

---



---

### WYANDOTTE COUNTY CODE OF PRINCIPLES

The Wyandotte County Medical Society adopted the following resolution of Principles and Stated Policies concerning the relation of physicians and hospitals:

"In view of a growing tendency among hospitals and insurance companies to take over various phases of the practice of medicine, the medical profession throughout the country is concerned with principles and policies that better insure the services of our profession for the public of the future.

Therefore: We, the Medical Economics Committee recommend adoption of the following, to be known as the: Code of Principles and Stated Policies of The Wyandotte County Medical Society, Governing The Relations of Physicians and Hospitals.

#### A. CODE OF PRINCIPLES:—

1. Community hospitals are civic enterprises, operated by philanthropic laymen who assume the financial obligation of providing place, equipment, and personnel, and by philanthropic physicians, who assume the obligation of providing medical care. Such hospitals are joint enterprises to render aid to the ill; the lay supporters contributing time and money as such, the medical supporters contributing time and money, in addition to professional services.
2. In order to provide hospitalization for charity patients, such hospitals customarily maintain accommodations for the care of full-pay patients as well as for the care of partial-pay patients, who pay for this service according to their ability.
3. In any instance however, the hospital, as a corporation, provides room, board, nursing care, and materials, beyond which it has nothing to dispose of. The medical staff enters the equation at this point as the essential element to make the service whole and effective.
4. The staff physicians' service is essential to the charitable purpose of the hospital, and his acceptance of an appointment has a certain contract implication, viz., to perform gratuitously professional services to make effective the hospitalization afforded gratuitously by the institution. A correlative

implication of the contract should be, that if the institution is recompensed for its service to the patient, the physician should be entitled to recompense in the same proportion. If hospitals owe it to their supporting public to make the load of charity as light as possible, they owe the same duty to their supporting staff; otherwise, the effect is, that the lay supporters are relieved in part of their burden, whereas the medical supporters bear the entire burden of their contributions.

5. The contributions of the profession to the hospital enterprise are not offset by any advantage offered by the hospital connection to the staff physicians. If it be said that the hospital lends prestige to the members of its staff; it is much more true that the prestige of the hospital depends upon the caliber of its staff.
6. Hospitals should realize that the profession, through its central organization, The American Medical Association, has evolved certain 'principles of medical ethics'. These principles outline the duties of physicians to each other, to the profession at large, and to the general public. Hospitals should realize that this code is the evolution of hundreds of years experience, and is based on principles that are primarily for the good of the public in order that the profession can serve it most effectively. Since the profession is bound by these principles, hospitals' boards should study them more carefully in order to better realize the physicians viewpoint. A knowledge of these principles should enable hospitals to better correlate their services with those of the profession in rendering adequate service to the public. One section of the 'Principles of Medical Ethics' with which many hospitals are apparently unacquainted states (Article 6, Section 4):—

'It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful



alike to the profession of medicine and the welfare of the people, and is against sound public policy”.

7. Hospitals being corporations; their management and policies are the prerogatives of their boards of directors. The organization of such boards however, commonly overlooks medical representation on the board as an essential factor to make their services most effective. This has occasioned two undesirable results: (1) establishment of policies prejudicial to the medical profession, because the influence and information of medical members has not been obtained, and (2) development of the idea that the staff members are merely servants of the institution, rather than essential partners.
8. It follows then, that the medical profession should insist upon proper representation on the governing boards of hospitals. They should insist upon status as partners, rather than servants, that the rights of the profession to their patients shall be protected by such representation.

#### B. STATED POLICIES:—

1. Hospitals shall not engage in any form of contract practice with an individual, or group of individuals, for any purpose other than that of pure hospitalization.
2. Hospitals shall not offer for a price, any professional medical service, and in no instance, charge and retain a fee for professional medical services.
3. Hospitals shall not charge patients for anything, other than materials and the use of their facilities.
4. Hospitals, that afford first aid services in accident and emergency cases, shall notify immediately the physician that is selected by the patient or party responsible for him; unless said parties request that the hospital arrange for the subsequent care and professional medical services. In no instance shall a non-indigent patient be admitted to the service of a staff member, without said parties request, or a request from his own physician, if there be one.
5. Hospitals shall not admit patients, at rates for the indigent or semi-indigent, who receive compensation, health, or accident insurance; unless they determine the patient's eligibility for such rates.
6. Dispensaries and Clinics for the poor, shall not admit or afford medical services to any patient except in an emergency, without

establishing proper proof of the patient's eligibility for such services.

7. Dispensaries and Clinics for the poor, shall not re-admit patients previously discharged, unless proof is established of present eligibility.
8. Hospitals, Dispensaries, and Clinics for the poor, shall be approved as regards their fair practices, at the annual meeting of the Wyandotte County Medical Society, as a condition upon which members of said Society may continue to serve on the staff of such hospital, dispensary, or clinic.

O. W. Davidson, M.D., Chairman.

L. V. Hill, M.D.

L. E. Growney, M.D.

Eldon S. Miller, M.D.

T. J. Sims, M.D.

---

## TUBERCULOSIS CONTROL

---

### A TENTATIVE EDITION OF DIAGNOSTIC STANDARDS\*

“A ‘Tentative Edition of Diagnostic Standards’, for tuberculosis of the lungs and related lymph nodes, has just been issued in pamphlet form by the National Tuberculosis Association through its Committee on Diagnostic Standards, appointed in 1936 and headed by Dr. Fred H. Heise, medical director of Trudeau Sanatorium, Saranac Lake, New York.

Both primary and reinfection tuberculosis are described under the heading, ‘Pathogenic Development of Pulmonary Tuberculosis’.

‘It is not always possible on clinical and roentgenological evidence to differentiate primary and reinfection tuberculosis’, says the committee. ‘It is important, however, to recognize the pathogenic phase in which a given lesion presents itself, since such knowledge is, within strict limitations, the safest available prognostic criterion.’

The tuberculin test, x-ray evidence, the history of exposure, symptoms and clinical manifestations, physical signs and laboratory methods are included under the section, ‘Diagnosis of Tuberculosis.’ Constitutional and local symptoms are explained in detail. The extent of pulmonary lesions is explained in a descriptive summary, as are obser-

\* Article by Dr. Fred H. Heise, medical director of Trudeau Sanatorium, Saranac Lake, New York, in a news release published by the National Tuberculosis Association.

# RECENT ADVANCES IN THE SCIENCE OF NUTRITION

## IV. Some Accomplishments of Vitamin D Research

● By 1932, many of the basic facts concerning Vitamin D had been clearly established (1). At that time, the International system of denoting vitamin D unitage had not been universally adopted. However, the antirachitic potencies of a wide variety of biological materials had already been explored; the need for standardization of assay methods was appreciated; the minimum requirement of infants and children for vitamin D had been estimated; and the probable "multiple" nature of the vitamin definitely indicated. Since 1932, the importance of vitamin D in human nutrition and the challenge of the many unanswered questions regarding this factor have served to stimulate research both in the clinic and in the laboratory. It is of interest to note some of the outstanding advances made in our knowledge of vitamin D which the past six years have brought. It is now known that at least ten different sterol derivatives are capable of exhibiting the physiologic properties of vitamin D. Of these, only two may be considered of prime importance as far as practical application in human nutrition is concerned, namely, the activation products of ergosterol and 7-dehydro-cholesterol. The remaining forms are of considerable theoretical importance in that their identification has completely established the multiple nature of vitamin D (2). Further research has also defined more closely not only the vitamin D requirements of normal infants and children, but also of premature infants and those peculiarly susceptible to rickets. Apart from conditions of pregnancy and lactation, the possible re-

quirement of the human adult for vitamin D is still not known (3). The International system of expressing vitamin D potency has been universally adopted; bioassay methods have been standardized (4); and last but not least, a high degree of standardization has been attained, not only in regard to the antirachitic potency of Vitamin D preparations, but also as to the extent to which the vitamin D contents of certain foods should be increased by the various means available (3).

While some foods, including some canned foods of marine origin, are valuable food sources of vitamin D (5), no combination of common foods—as they occur naturally—can supply the demands of the infant and child for the antirachitic factor. Although there is no reason as yet to believe that the normal adult requirement for vitamin D is not largely fulfilled by a varied diet of protective foods, it is definitely known that the infant and child dietaries must be supplemented with or fortified by vitamin D.

It is in the formulation of basic diets for either infants or adults that commercially canned foods should prove especially valuable. Among the great variety of American canned foods are included special foods for use in child and infant feeding which, when properly supplemented or fortified, should meet the nutritive demands of those stages of life. For the normal human adult—whose diet hardly requires special supplementation—there are a large number of canned foods available which readily permit formulation of a varied diet of the so-called protective foods.

## AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

(1) 1932. J. Amer. Med. Assn. 99, 215 and 301.

(2) J. Amer. Med. Assn. 110, 2150.

(3) Ibid. 110, 703 and 1179.

(4) 1936. U.S. Pharmacopeia, XI Decennial Revision.

(5) 1935. J. Home Econ. 27, 658.

1933. Science 78, 368.

*We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the forty-third in a series, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.*



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.



vations bearing on cases considered arrested, quiescent, etc.

A form for the description and classification of common thoracic lesions is included in the pamphlet. There are no important changes from former Diagnostic Standards in the sections on location and extent of lesions.

The National Tuberculosis Association offers the pamphlet tentatively 'in order that it may be tried out by clinicians and public health administrators.' It welcomes comments from both specialist and general practitioner. This is the eleventh issue of 'Diagnostic Standards.' The publication does not attempt to formulate new or original principles, but only to incorporate those which are already well established.

## NEWS NOTES

### DUES

The 1939 membership reports will be forwarded to the secretaries of county medical societies within the near future.

As approved by the House of Delegates, the dues for next year will be \$10.00 per member.

The following ruling contained in the Constitution and By-Laws became effective January 1, 1937:

"A member of any component society who is shown in an annual report to be in suspension for non-payment of dues shall be reinstated by such component society upon payment of his assessment during that year. If a member shall remain in arrears in payment of his dues beyond the following December 31st, he shall lose his membership and shall not be entitled to reinstatement except upon formal action of his component society and upon payment of all assessments in arrears."

All members are requested to assist their secretary in the collection of dues by making prompt remittances.

### INDIGENT CARE

The following article appeared in Cecil Howes column in the Kansas City Star on November 29:

"Nearly one-half of the Kansas counties already have adopted the plan of public health service worked out by the state board of social welfare and the Kansas Medical Society. This plan contemplates the greatest freedom of choice of physicians by the indigent and the public welfare funds of each county pays the bills of the doctors as they come in.

When the state social welfare law was passed two years ago, it contained a provision that the state board should work out some plan for the medical care of those on relief. The board asked the Kansas Medical Society to name a committee to help work out the program. The committee was composed of six county commissioners, six welfare workers and four members of the medical profession.

The plan adopted as the most feasible for use in Kansas was for the county medical societies to work out a contract with their county boards for the care of the indigent sick. All the members of each county society were to be placed under the contracts either on a lump sum or a controlled fee basis as the county boards may determine. Under this plan any indigent person may call any physician he desires. The doctor makes the call and sends the bill to the county, or is paid a lump sum for being available each year.

There are fifty-one of the 105 counties which have adopted this plan. Of these forty operate under the controlled fee basis, that is, the physician gets a certain fee for each call. There are eleven which pay a lump sum to every physician under contract for a year's services.

There are five counties which maintain full time county physicians, men who devote all, or most of their time, to caring for the indigent sick and they are the only physicians that may be called upon for medical advice or care. Also there are nine counties which employ part-time physicians and the indigent sick in those counties can call only on this physician for medical assistance."

The above article is an excellent summary of the progress which has been made in this state on the subject of indigent medical care during the past several years. It is also believed that information of this kind in newspapers is of particular assistance in securing the interest and aid of the public in the handling of this problem.

### 1938 MEETING

The Sedgwick County Medical Society recently completed its report of costs of the 1938 State Meeting.

The report shows a total cost of \$155.19 to the Society after all receipts and disbursements were considered.

The attendance at the 1939 meeting and the cost, established a new record for the Society, at least for recent years.

### MEDICAL SUPPLEMENT

Shawnee County Medical Society cooperated with the Topeka State Journal in publishing a special medical supplement on November 9.

The greater portion of the supplement was devoted to a discussion of Shawnee County Medical Society's suggestion to the Shawnee County Commissioners that a county hospital should be constructed in that county to assist in the provision of indigent medical care.

The supplement was well presented and it contained much information which should be of interest to the public. Although medical supplements listing public health and medical information have appeared in various parts of the country, it is believed that this is one of the first supplements to feature a medical economics subject.

### COMMENT

The following letter has been received from Dr. W. G. Smillie, Cornell University Medical School, New York.

"I wish to beg permission to comment upon an article that appeared in the Journal of the Kansas Medical Society, September, 1938, page 376, entitled, 'The Negative Phase of Typhoid Vaccination,' by Dr. Michele Gerundo.

In brief, the author cites a case of typhoid fever in which a confirmatory diagnosis by blood culture was obtained during the first week of illness. The family physician quite



## CAMP SUPPORTS KNOW NO SOCIAL REGISTER



*This exhibit is now on a nationwide tour in the interest of public health education.*

ONE of the most significant observations made during public showings of the Camp Transparent Woman is the fact that "Judy O'Grady an' the Colonel's Lady" display the same intense interest in this remarkable exhibit—not to mention the same ignorance about the structure of their own bodies.

To date over two million persons have seen the Camp Transparent Woman. The medical profession realizes, of course, that just as this interest in the Camp Transparent Woman knows no social register—the *need* for correct scientific support is equally unmindful of social rank. The variety of Camp models embraces the same broad scope; for S. H. Camp & Company sponsor a special garment

for every figure requirement.

It is important, therefore, to remind doctors that the sensible, low prices of Camp Supports bring them within reach of *all* who need them. Constant research and close collaboration with medical authorities help to make Camp Supports the very finest and most effective supports obtainable *at any price*. Fitters trained by the Camp organization are available in good stores throughout the country to assure doctors that their prescriptions will receive expert attention.

Camp Supports are never sold by door-to-door canvassers. It is not surprising therefore that many doctors, in prescribing scientific garments, make sure to *specify* Camp Supports.

**CAMP** TRADE MARK *Supports*

S. H. CAMP & COMPANY, JACKSON, MICHIGAN



Offices in: New York, Chicago, Windsor, Ont., London, England • World's largest manufacturers of surgical supports





properly followed the universally accepted practice of giving typhoid vaccine at once to all family contacts. A sister of the first patient developed nausea, vomiting, and fever three hours after the injection of the first dose of vaccine. These symptoms became aggravated, manifest typhoid fever developed, and the second patient died on the eighth day of her illness, of typical typhoid fever.

The author of this article develops the hypothesis that the injection of prophylactic dose of vaccine lowered the resistance of the individual, shortened the incubation period of the disease, and changed the picture of a silent form (of typhoid fever) to a rapidly manifesting disease. He states:

"The true manifestations of the disease started only after the injection of vaccine and all the successive course of illness is certainly dependent upon the negative phase of the vaccination."

I wish to state emphatically that the author has no justification for the development of this hypothesis. There is no evidence that the prophylactic typhoid vaccine given to this patient lowered her resistance, shortened the incubation period of her illness, or increased the virulence of her infection. There is not the slightest evidence that the successive course of her illness was dependent upon the negative phase of the vaccination.

On the contrary, Ramsey's\* studies in New York State upon the value of typhoid vaccine in family contacts has shown conclusively that there is no danger, but rather a real advantage, in giving typhoid vaccine to all individuals who have had immediate familial contacts with a patient of typhoid fever.

In the millions of vaccinations that have been given as a prophylactic against typhoid fever, I have been unable to find a single instance in which the vaccine has been a cause of death—in fact, a cause of anything more than a temporary inconvenience.

The family physician mentioned in this article is to be highly congratulated in his handling of the situation. He made an early tentative diagnosis of the primary case of typhoid fever, and obtained verification by positive blood culture during the first week of the disease. He followed the standard and universally accepted practice of immediate immunization of all family contacts. He knew full well that if any member of the family happened to be in the actual incubation stage of the disease, the vaccine would not abort the attack, but even in this eventuality the vaccine would do no harm. One member of the family happened to be in the initial stages of typhoid fever when the vaccine was given. There was no way of determining this fact, and no harm was done, for the vaccine had nothing to do with the subsequent course of events."

\*Ramsey, G. H.: American Journal of Hygiene, 1938, Volume 21, page 665.

## RESEARCH

The University of Kansas School of Medicine announced recently that the George A. Breon Company of Kansas City, Missouri, had contributed a \$1,500.00 fellowship for research on hypertension.

Dr. Joseph Lalich, University of Kansas Hospital, Kansas City, Kansas, will act as director of this work.

## COUNTY ORGANIZATION

The physicians in Russell County organized a Russell county medical organization at a meeting held in Russell on October 30.

It is planned that the organization will continue to func-

tion as a component part of the Central Kansas Medical Society but that frequent local meetings will be held for presentation of scientific programs and discussion of business matters.

Officers elected are as follows: Dr. G. H. Penwell, Russell, president; Dr. F. N. White, Russell, vice president; Dr. B. J. Weigel, Gorham, secretary-treasurer.

## NEW APPOINTMENT

Governor Walter Huxman announced recently that he had reappointed Dr. W. C. Lathrop of Norton as a member of the Kansas State Board of Health.

## AMERICAN COLLEGE OF PHYSICIANS

The Kansas section of the American College of Physicians met on November 4 at The Menninger Sanitarium in Topeka. The program presented was as follows:

"Some Facts Concerning Gastric Acidity," Dr. Philip W. Morgan, Emporia.

Case Presentations:

1. "Isolated Congenital Dextrocardia."

2. "Ruptured Heart with Hemopericardium Following Coronary Occlusion," Dr. Kenneth L. Druet, Salina.

"Headaches," Dr. Norman Reider, Topeka.

"The Role of the Pituitary Gland in Clinical Medicine," Dr. A. J. Revell, Pittsburg.

"The Misuse of Digitalis," Dr. Frank A. Trump, Ottawa.

"Gall Bladder Dysfunctions," Dr. Fred Angle, Kansas City

"Case of Acute Idiopathic Hematoporphyria With Acute Ascending Paralysis," Dr. Harold W. Palmer, Wichita.

"Cardiac Neuroses," Dr. William C. Menninger, Topeka.

## N. Y. A.

The Sedgwick County Medical Society is making arrangements with the National Youth Administration to conduct a health investigation of the 300 N. Y. A. clients in that county.

Plan of the study is that representatives of the Sedgwick County Medical Society will provide physical examinations of the above group; that the results will be tabulated to determine the amount and kind of physical defects discovered; facilities will be offered to provide treatment of these conditions without expense to the recipients; and questionnaires will be provided to determine the amount and kind of known and unknown disabilities, the reasons why each has not been corrected, and the number willing to accept treatment.

The interesting nature of the group, the ability to compile a thorough study of the complete group and several other factors should make this experiment an interesting contribution to the subject of provision of medical care to persons with low incomes.

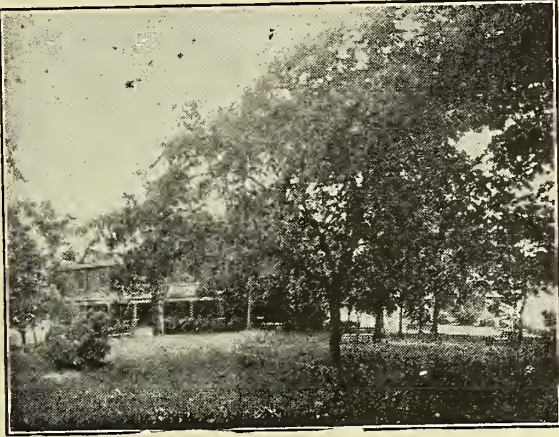
## COMMITTEE MEETINGS

The following are minutes of recent meetings of the Committee on Medical Economics and the Committee on Maternal and Child Welfare:

A meeting of the Committee on Medical Economics was held in Topeka, on November 13. Members present were F. L. Loveland, M. D., Chairman; N. E. Melencamp, M. D.; C. C. Nesselrode, M. D.; A. J. Revell, M. D.; E. N. Robert-

# Grandview Sanitarium

KANSAS CITY, KANSAS. (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of super accommodations for the care of:

NERVOUS DISEASES

MILD PSYCHOSES

THE DRUG HABIT

AND INEBRIETY.

Situated on a 20-acre tract adjoining City Park of 100 acres. Room with private bath can be provided.

The City Park line of the Metropolitan Railway passes within one block of the Sanitarium. Management strictly ethical.

Telephone: Drexel 0019

SEND FOR BOOKLET

**E. F. DeVILBISS, M.D., SUPT.**

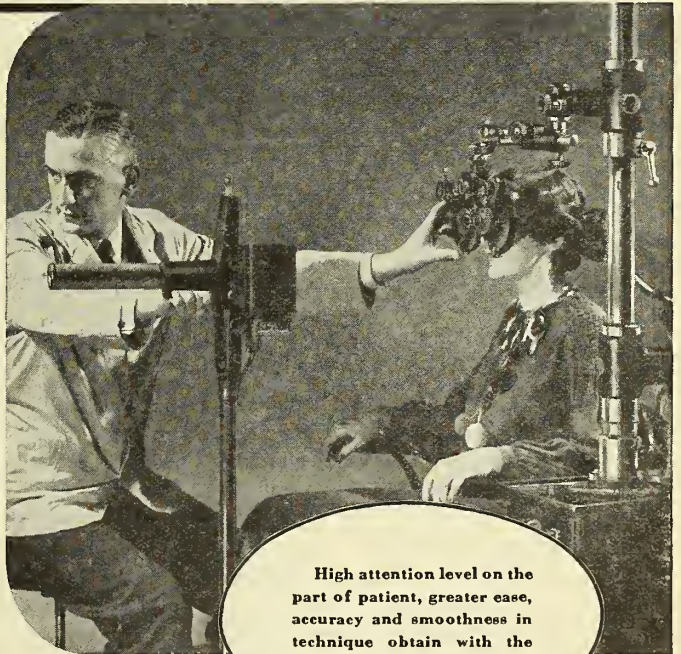
OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.

## AO Project-O-Chart

*Successor to the Test Card Type  
of Ophthalmic Examination*

Clinical tests and wide practical acceptance have proved the value of American Optical Project-O-Chart in ophthalmic diagnosis. Results of the outstanding performance of this instrument are increased accuracy in diagnosis and better satisfied patients.

A booklet containing complete information on this modern instrument may be obtained from your AO representative.



High attention level on the part of patient, greater ease, accuracy and smoothness in technique obtain with the use of the Project-O-Chart.



## American Optical Company



son, M. D.; J. F. Gsell, M. D.; W. N. Mundell, M. D.; H. L. Snyder, M. D.; H. M. Glover, M. D.; B. A. Nelson, M. D.; W. R. Dillingham, M. D. Clarence G. Munns was present as Executive Secretary.

Dr. Snyder and Dr. Nesselrode presented a report on the national health program and on the recent special meeting of the House of Delegates of the American Medical Association.

A report was given as to the present status of the American Medical Association survey in Kansas. Decision was made that the committee should issue a bulletin reiterating the importance of this activity.

A report was given concerning the present status of group hospitalization in the state. Dr. Glover and Dr. Nelson were asked to serve as a sub-committee to investigate and make recommendations on this subject.

A report was given concerning the present status of prepayment and farm security plans for provision of medical attention. Dr. Revell and Dr. Robertson were asked to study and make recommendations upon this subject.

Upon a motion by Dr. Nelson, seconded and carried, the committee reaffirmed its desire to assist the Kansas State Board of Social Welfare in any way possible on the subject of indigent medical care, and it was decided the committee shall continue its efforts as in the past toward providing efficient and workable plans for provision of needy medical care on the individual county basis.

Upon a motion by Dr. Dillingham, seconded and carried, a recommendation was made that the President of the Society and the Chairman of this committee should attempt to arrange a series of meetings with the leaders of labor and farm groups for discussion of medical care problems.

Decision was made that the chairman of the committee should prepare a bulletin or series of bulletins to the county medical societies stressing the need for local economics committees, the need for practical and reasonable fee schedules, indigent medical care, etc.

Dr. Loveland was authorized to appoint an editor for the Medical Economics Section of the Journal.

Adjournment followed.

A meeting of the Committee on Maternal and Child Welfare was held in Emporia on October 30. Members present were Ray A. West, M. D., Chairman; C. Meredith, M. D.; B. I. Krehbiel, M. D.; H. R. Ross, M. D.; L. A. Calkins, M. D.; Howard Clark, M. D.; Porter Brown, M. D. Dr. Rothert and Mr. Jack Jeffery, Executive Secretary of the Washington State Medical Society, were present as guests of the committee. Clarence G. Munns was present as Executive Secretary.

Dr. Ross reported on the present status of smallpox in Kansas. Upon motion by Dr. Calkins, seconded and carried, Dr. Ross was asked to confer with the Attorney General on the possibility of requiring compulsory vaccination prior to admission of students to public schools thru the adoption of a regulation in that regard by the Kansas State Board of Health.

Discussion followed concerning the maternal and child welfare postgraduate course to be held in western Kansas during the latter part of November and first part of December, and upon the problem of securing speakers for programs of this kind. It was decided the committee should recommend to the Kansas State Board of Health that in future maternal and child welfare postgraduate courses an effort should be made to obtain Kansas specialists on these subjects as speakers on a rotated basis.

Dr. Meredith reported on publicity pertaining to the

Mother's Manual which he is preparing for inclusion in the Journal.

Dr. Ross reported concerning a form for reporting of maternal and child welfare information to the Kansas State Board of Health. He stated that the Board is interested in this possibility; and that a further report will be made to the committee at a later date.

Decision was made that the committee should publish a pamphlet which shall include articles by Kansas physicians on prenatal care, standardized methods of delivery, post-natal care, most common causes of maternal and child deaths, immunization, etc. Dr. Brown was asked to serve as chairman of a sub-committee to supervise and prepare the pamphlet.

Dr. Calkins presented a report concerning the possibility of the committee recommending standardized obstetrical rules and regulations for adoption by the staffs of Kansas hospitals.

Following a discussion of this suggestion, it was decided that the committee should bulletinize this recommendation to the county medical societies.

Dr. Calkins also recommended a plan for provision of obstetrical service to indigent and semi-indigent persons. Upon motion by Dr. Meredith, seconded and carried, it was agreed that this proposal should be tabled until a later meeting.

Dr. Clark was asked to discuss with Dr. Ross the question of placement of incubators available through the Kansas State Board of Health.

Dr. Meredith was asked to correspond with Dr. George Milbank, Chairman of the Committee on Allied Groups, about the question of provision of Wassermanns in prenatal care.

Dr. Krehbiel was asked to confer with Dr. C. H. Kinamon in regard to the possibility of developing a more efficient plan for conduct of county immunization programs.

Dr. Krehbiel was asked to consider and report on Kansas quarantine regulations at the next meeting of the committee.

The question of ante-nuptial physical examinations and birth control were also tabled until the next meeting of the committee. The central office was asked to correspond with Mrs. Marion Post, Field Representative of the American Birth Control League, in regard to the action taken on birth control.

It was decided that the next meeting of the committee should be held in Topeka during the middle of January.

Adjournment followed.

A meeting of the Committee on School of Medicine will be held in Emporia on December 18 and a meeting of the Committee on Tuberculosis was held in Topeka on December 11. Minutes of both of these meetings will appear in the next issue of the Journal.

## A. M. A. SURVEY

The Committee on Medical Economics issued the following bulletin on December 10:

"We have recently received the following letter from Dr. W. F. Braasch, Chairman of the American Medical Association Committee on Supply of Medical Care:

'It would be highly desirable to have the nationwide survey of the Supply of Medical Service which is being sponsored by the American Medical Association completed within the next few months. In fact, every effort should be made to get in as many returns as possible by December 1. We are urging this in order to have statistics available

**16,000****ethical**

Since 1902

**practitioners**

carry more than 50,000 policies in these Associations whose membership is strictly limited to Physicians, Surgeons and Dentists. These Doctors save approximately 50% in the cost of their health and accident insurance. We have never been, nor are we now, affiliated with any other insurance organization.

**\$1,500,000 Assets**

Send for application for membership in these purely professional Associations.

**\$200,000 Deposited with the State of Nebraska**

for the protection of our members residing in every State in the U.S.A.

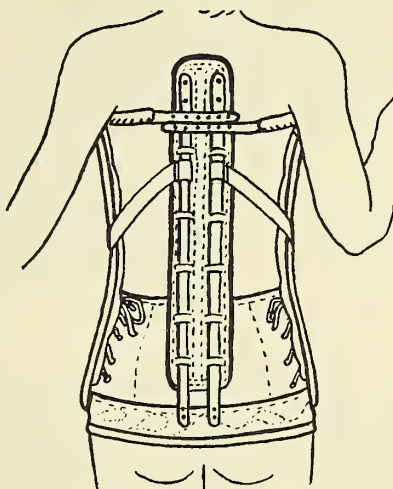
**PHYSICIANS CASUALTY ASSOCIATION**

**PHYSICIANS HEALTH ASSOCIATION**

400 First National Bank Building  
**OMAHA - - - NEBRASKA**



Since 1912

**A COMPLETE SERVICE**

We make all types of braces, splints, belts, elastic hose, crutches, arch supports and special apparatus.

If your patients cannot come to us we will come to them. Prices reasonable.

**Camp's Supports**

**Kansas City Brace & Splint Co.**

Phone Drexel 0640

847 Minnesota Avenue Kansas City, Kansas

**Hotel Jayhawk**

**TOPEKA ~ KANSAS**

**Main Dining Rooms and Coffee Shop**

**Air Conditioned and Refrigerated**

**Many Private Dining Rooms Available for Special Parties**

**THE MOSBY HOTEL CO.**

**N. M. Mosby, Pres. & Gen. Mgr.**

**WOODCROFT HOSPITAL**

**PUEBLO, COLORADO**

Founded 1896 by Dr. Hubert Work

A modern, newly constructed sanitarium for the scientific care and treatment of those nervously and mentally ill, the senile and drug addicts.

**CRUM EPLER, M.D.**  
Superintendent



at the time Congress convenes in January. The National Health Program probably will be introduced for congressional action at that time and the value of having on hand as much information as possible regarding the problems of medical care is self-evident.

'We are relying upon you to use every effort to gather the returns from as many counties as possible within the next few weeks. If Doctor Leland or I can be of any help to you in furthering your survey, please let us know.'

This, we think, illustrates the importance of the American Medical Association Medical Care Survey, and the need for efficient and complete assistance from each county. If your county has not already commenced activity on its portion of the survey, we would like to suggest that it do so immediately."

---

### POSTGRADUATE COURSE

The attendance for the first week of the sixth postgraduate course, held in western Kansas, on obstetrics and pediatrics totaled 71 physicians. The course began on November 28 and will be four weeks in length.

Speakers for the course are Dr. M. Edward Davis and Dr. Wm. J. Dieckmann, from the University of Chicago, and Dr. Rollin E. Cutts and Dr. John M. Adams from the University of Minnesota.

---

### 89TH ANNUAL SESSION

Plans for the 89th Annual Session to be held in Topeka on May 1, 2, 3, 4, 1939, are being made by the committees of the Shawnee County Medical Society. The general meeting place will be in the Masonic Temple where the registration booth, commercial exhibits, and scientific exhibits will be placed and the scientific program will be presented. Luncheons and dinners will be held at the hotels in Topeka.

Dr. L. R. Pyle, Chairman of the Program Committee; Dr. F. C. Taggart, Chairman of Scientific Exhibits; and Dr. E. H. Decker, Chairman of the Golf and Trap Tournaments, are making arrangements to present a meeting which will be of interest to all members of the Society.

---

### COUNTY SOCIETIES

The Butler-Greenwood County Medical Society met on November 11 with Dr. F. L. Menehan, Wichita, speaking on "Present Status of Preventive Pediatrics."

Members of the Clay County Medical Society met on November 9 in Clay Center. Dr. V. E. Chesky, Halstead was the guest speaker and his topic was "Heart Symptoms from Degenerative Goiter."

Dr. E. O. King, Herington, was elected president of the Dickinson County Medical Society at a meeting in Abilene on October 20. Dr. Schuyler Nichols, Herington, as vice president and Dr. A. D. Danielson, Herington, secretary-treasurer will also serve during 1939.

A meeting of the Douglas County Medical Society was held in Lawrence on November 1. Dr. Don Carlos Peete, University of Kansas School of Medicine, Kansas City, Kansas, was the principal speaker.

The Lyon County Medical Society held a meeting in Emporia on November 1.

Thirty-nine members of the Labette County Medical Society and Auxiliary attended the annual Thanksgiving dinner given by Dr. and Mrs. J. T. Naramore, in Parsons on November 25.

Members of the Osage County Medical Society met in Lyndon on November 17 for a business session and a movie lecture on "Syphilis."

Dr. E. M. Seydell and Dr. J. W. Shaw, both of Wichita, were guest speakers on the program presented at the meeting of the Pratt County Medical Society in Pratt on November 25. Dr. Seydell spoke on "Acute Otitis Media, Mastoiditis and Its Complications" and Dr. Shaw spoke on "Trichomonis Vaginalis Vaginitis and Its Differential Diagnosis."

The Saline County Medical Society met in Salina on November 10. Approval was given the establishment of a venereal disease clinic and the scientific program consisted of the following papers: "Treatment of Whooping Cough with Cevitamic Acid" by Dr. George Stafford, Salina; "Disturbances of the Coronary Circulation and Their Management," by Dr. Maurice Snyder, Salina.

Shawnee County Medical Society held its annual meeting in Topeka on December 8, at the Topeka Country Club. Golf in the afternoon was followed by a banquet in the evening at which the speaker was Dr. Howard T. Hill of the Department of Public Speaking, Kansas State College, Manhattan.

The Washington County Medical Society held a meeting in Washington on November 8. Dr. Harold Lynch, Fairbury, Nebraska, was the guest speaker on the scientific program.

Dr. Clifton Hall, Topeka, gave the principal talk on the program of the meeting of the Wilson County Medical Society held in Fredonia on November 8.

Members of the Wyandotte County Medical Society met in Kansas City on December 6 with the following speakers on the program: Dr. H. L. Gainey, Kansas City, "Arterio-Ureteral Fistula with Muscle Flap Repair"; Dr. Robert M. Eisenberger, Kansas City, "Muscle Flap Repair of Perforation of the Larger Arteries."

---

### MEMBERS

Dr. Lewis G. Allen, Kansas City, was installed as president of the Kansas City Southwest Clinical Society at a meeting of that organization in Kansas City on October 3 to 6.

Dr. F. E. Dargatz, formerly of Kinsley, is now in charge of the Carter County Health Unit in Ardmore, Oklahoma.

Dr. Lynn Beal, Fredonia, was recently appointed city health officer for his community.

Dr. Lerton V. Dawson, formerly of Ottawa, has located in Excelsior Springs, Missouri, where he will continue his practice.

Dr. G. C. Haughey has opened an office in Towanda. He was formerly of West Mineral.

Dr. Grant Meyer, Marion, has been appointed county health officer of Marion County.



# MAN

# AT

# Work

Here is a man at work, saving a life. He differs from most workmen because he will do his job whether or not he is paid for it. But he is only human, and has human needs to pay for, so that money means as much to him as it does to any other workman.

When this man is working on a patient whose care is in the province of EMPLOYERS MUTUAL LIABILITY INSURANCE COMPANY, he knows that his bill will be paid promptly . . . that he need spare no medical aid or attention . . . that his patient's progress will not be retarded by worry over financial affairs.

He knows that complete recovery is more important than an early return to work . . . that rehabilitation is more imperative than a few dollars' saving.

The same prompt service, broad-gauge view, and complete coverage is offered to doctors in their own insurance by EMPLOYERS MUTUALS. They can give you complete protection on Automobile, Public Library, Workmen's Compensation, Plate Glass, Burglary, and Fire Insurance—with maximum service at minimum cost. Write or phone the nearest office—or the Home Office.

EMPLOYERS MUTUAL  
LIABILITY INSURANCE CO.

*Employers  
Mutuals*

EMPLOYERS MUTUAL  
FIRE INSURANCE CO.

*Automobile, Public Liability, Workmen's Compensation  
Plate Glass, Burglary, Fire and Tornado Insurance*

HOME OFFICE: WAUSAU, WISCONSIN

**WICHITA: 914 UNION NATIONAL BLDG.**

*Branch Offices and Resident Representatives throughout the Middle West  
Consult Your Local Telephone Directory*



## DEATH NOTICES

Dr. Charles Jason Callender, 76 years of age, died at his home in Anthony on November 2. Dr. Callender was born in 1862 and received his medical degree from the New York University Medical College in 1890. He was an honorary member of the Harper County Medical Society.

Dr. William Edward Youngs, 66 years of age, died in Mercy Hospital in Independence on November 7. Dr. Youngs was born in Eaton, Indiana, in 1872 and attended the grade schools in Derby, Kansas. He graduated from the Barnes Medical College in St. Louis, Missouri, in 1898. After receiving his degree Dr. Youngs located in Cherryvale and moved to Independence in 1923 where he continued to practice until the time of his death. Dr. Youngs was a member of the Montgomery County Medical Society.

## BOOK REVIEWS

NEW AND NONOFFICIAL REMEDIES, 1938. American Medical Association, 535 North Dearborn Street, Chicago, Illinois. An annual report by the A. M. A. Council on Pharmacy and Chemistry on the remedial agents which stand accepted by the council with quarterly supplements. Price \$1.50.

There is a large number of excellent publications offered to the medical profession every year but only this one can be truly termed indispensable for rational therapeutics. Our need is great for aid from experts, who can critically investigate new products and properly evaluate claims made by those commercially interested. The bewildering deluge of new therapeutic agents offered us annually renders the practitioner helpless to judge their true merits, and were it not for the constant and unbiased service of the Council on Pharmacy and Chemistry, he would be at the mercy of the sales promotion men. A recent drug disaster clearly demonstrates the possible results of the latter method.

This little volume which is familiar to all, contains the rules of the Council and these are for the purpose of protecting the physician. The accepted articles are listed in alphabetical order including a list of the accepted brands of each. There is also a list of proprietary products which have been investigated but are not included in N. N. R.—D.C.W.

PRACTICAL OTOTOLOGY—by Morris Levine, M. D., Second Edition, 146 engravings, 3 colored plates, 416 pages. This book is made interesting and easy to read because it holds entirely to its title of being practical. The author gives one the essentials of anatomy and physiology without going into detail thus causing no confusion.

It is so clearly written and so concisely stated that it is a pleasure to read, rather than a task. In other words, the author has given us a book which really covers all the subjects in the ear nicely and thoroughly. It is not an outline or compend. It is a thorough book with non-essentials omitted.

I can highly recommend it for the otologist and the general practitioner.—H. W. P.

THE 1937 YEAR BOOK OF EYE, EAR, NOSE, AND THROAT—Published by the Year Book Publishers, Chicago, Illinois. 640 pages, 113 figures for illustration. Price \$3.50.—Though this book has been out almost a year, it is not too late to call attention to its value in keeping a library up to date. As usual there is the concise summary of the leading articles published, with footnotes referable to various statements. It will be a good book to have for future references.—B. J. A.

## AUXILIARY

## PRESIDENT'S MESSAGE

Dear Auxiliary Members:

I will continue with the Plans and Policies for 1938-39 sent to me by Mrs. Tomlinson, our National President.

Legislation: The increasing interest of ambitious politicians and misguided economists in matters of public health should convince us of the importance of a vigilant interest in legislation. Legislative bills that are harmful to medicine are even worse for the public. We must become familiar with all bills that touch upon health, and exercise our sincere interest toward the prevention of pernicious legislation. The auxiliary should not, however, venture into such activity, collectively or individually, except upon advice of and guidance under, a local governing advisory committee of its medical society.

Radio: The Bureau of Health Education of the American Medical Association is promoting attractive programs over the Blue Network each week. These programs are both entertaining and instructive. They include subjects covering various phases of health in dramatized form. Each local auxiliary will render a service to the community if, through its influence, these broadcasts are made available over the station serving that particular area.

Exhibits: Exhibits have proved to be of ever increasing interest and importance. They provide visible evidence of the manner in which our members have met the problems of conveying sound medical information to the laity. Both state and county auxiliaries are urged to stimulate greater interest in this extremely helpful branch of our work.

Finance: In order that your national Treasurer and Chairman of Finance may serve you best, it is essential that they be supplied with accurate up-to-date records and complete alphabetized membership lists. Your cooperation and promptness is most essential.

Archives and Historian: It is through these chairmen that a permanent record of activity, growth, and achievement of the auxiliary is made. The Historian is responsible for all material that goes into the hands of the Chairman of Archives, to be filed as a permanent record of auxiliary activity. It is suggested that each county unit maintain a scrap-book with clippings depicting activities of the auxiliary as an organization and of the individual members thereof. In time, such a book would be of great historical value to the community.

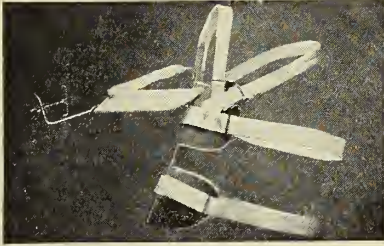
Membership Award: It is with increasing interest that we watch the growth of the membership of the auxiliary. The committee on Membership Award has reported to me at the meeting of the Board in November regarding the basis upon which this award will be given.

Conclusion: Never in the history of American medicine has there been a parallel to the present crisis. Helping the auxiliary means helping your husband, his profession, and humanity. We of the auxiliary are in a position to lend valuable aid. Let us meet our responsibilities with a determination born of success.

I attended the Mid-Winter Board meeting in Chicago November 11 and will give you a full report of the meeting and also our state board meeting which was held in Hays, December 1, in my next letter to you.

Hoping you are all enjoying your Christmas vacation and wishing you a prosperous New Year individually and for the Auxiliary, I am,

Mrs. F. E. Coffey.

**THE W. E. ISLE COMPANY**1121 Grand Ave.  
Kansas City, Mo.Entire 2nd Floor  
Victor 2350**IMMEDIATE DELIVERY ON SPLINTS**Campbell  
Aeroplane  
Clavicle**PROMPT  
SERVICE****JOHNSON HOSPITAL  
CHANUTE, KANSAS**Complete Clinical  
Laboratory  
Radium  
X-Ray**The Mary E. Pogue School**

Established 1903

*for exceptional children*

Individual instruction for backward and problem children of any age. Separate building for boys. Epileptics accepted. G. H. Marquardt, medical director. W. H. Holmes, consultant. Gerard N. Krost, pediatrician.

**Wheaton, Ill. Phone—Wheaton 66**  
40 Geneva Road

**SURGICAL FITTINGS**

Graduate Fitters

Private Fitting Rooms

Your patients requiring **SURGICAL SUPPORTS** for Abdominal Ptosis conditions, Sacro-Iliac strains, Maternity, Post-Operative weakness, and different forms of Hernia, will be correctly fitted, when referred to

**A. M. Petro & Son**

Surgical Fitters and Pharmacists

839 N. KANSAS AVE., TOPEKA, KANSAS  
ELASTIC HOSIERY—TRUSSES—  
CURTIS PTOSIS SUPPORTS



The Lassen's dining service enjoys a well-won reputation for an excellence of food and service the most exacting guest can require. Here the leading conventions, of professional and business men are held. The Lassen cordially invites the members of The Kansas Medical Society to sojourn at this fine hotel when visiting Wichita.

HENRY HAYN, MANAGER

**HOTEL LASSEN**  
Wichita, Kansas

**Cook County  
Graduate School of Medicine**

(In affiliation with COOK COUNTY HOSPITAL)  
Incorporated not for profit

**ANNOUNCES CONTINUOUS COURSES**

**MEDICINE**—Personal Courses and Informal Courses starting every week. Two Weeks Course in Internal Medicine starting June 5, 1939.

**SURGERY**—General Courses One, Two, Three and Six Months; Two Weeks Intensive Course in Surgical Technique with practice on living tissue; Clinical Courses; Special Courses. Courses start every Monday.

**GYNECOLOGY**—Two Weeks Course starting February 27, 1939. Clinical and Personal Courses starting every week.

**OBSTETRICS**—Two Weeks Intensive Course starting March 13, 1939. Informal Course starting every week.

**FRACTURES & TRAUMATIC SURGERY**—Informal Course every week; Intensive Ten Day Course starting February 13, 1939.

**OTOLARYNGOLOGY**—Two Weeks Intensive Course starting April 10, 1939. Informal Course starting every week.

**OPHTHALMOLOGY**—Two Weeks Intensive Course starting April 24, 1939. Informal Course starting every week.

**CYSTOSCOPY**—Ten Day Practical Course rotary every two weeks.

**GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES.**

**TEACHING FACULTY—ATTENDING STAFF OF COOK COUNTY HOSPITAL**

Address: Registrar, 427 South Honore Street,  
Chicago, Illinois.



The Wyandotte County Auxiliary met October 14 at the home of Mrs. L. B. Gloyne. Previous to the business session luncheon was served, after which Mrs. E. A. Reeves, accompanied by Mrs. Gloyne, gave several vocal numbers. Mr. James Porter spoke on "Impressions of Europe." Dr. Omer C. West, state auxiliary chairman, addressed the meeting with an interesting and inspirational talk. In addition to thirty-eight members, who answered roll call, guests were present from Hays, Topeka, Parsons and Dodge City. Mrs. F. S. Carey, President, announced the following committee chairmen: Program, Mrs. D. N. Medearis; Social, Mrs. E. R. Millis; Health Education, Mrs. L. B. Spake; Press Publicity, Mrs. J. A. Billingsley; Public Relations, Mrs. C. Omer West; Membership, Mrs. L. B. Gloyne; Hygeia, Mrs. A. J. Rettenmaier.

The Shawnee County Auxiliary held their November meeting at the home of the President, Mrs. Floyd Taggart. In addition to routine business the auxiliary arranged for a subscription drive for Hygeia in December. Old copies of this magazine are being collected and placed in beauty shops. Members were requested to bring to the December meeting a toy or book for the crippled children in Christ's Hospital. They will be prepared for distribution at this meeting. The literary program of the November meeting was the reading and discussion of the story "On the Witness Stand."

The Labette County Auxiliary met at the home of Mrs. A. C. Baird. After the transaction of routine business Mrs. M. C. Ruble, President, reviewed the book "Skin Deep." Refreshments appropriate to the season were served.

Excerpts from the inaugural address of the National President, Mrs. Charles C. Tomlinson.

"Our organization is without parallel as an auxiliary body in its opportunity to serve, not only the medical profession, but mankind, in the bringing about of that greatest of all human assets—good health.

With our objectives as unselfish as those of the profession of which we are an integral part, with an idealism as noble in thought as it is practicable in its application, our progress will be determined by our individual efforts. In our labors as an Auxiliary to the American Medical Association we strive to uphold the dignity and honor of traditional medicine and to render a public service, the significance of which will be appreciated by all those blessed with a recognition of the fact that life and health come first as natural prerequisites of the happiness of mankind.

The American Medical Association has always stood for, and I am confident will always stand for, a system of medical practice which will best serve Americans. It is our duty as the auxiliary to this great association to aid in a valiant manner the upholding of its wholesome principles and to resist, with all our strength, the influence of selfish and uninformed groups who seek to mold public opinion. Though we are in our youth, as an organization, and find ourselves in a world of turmoil in which unprecedented trends rock the very foundations of established institutions. Let us not become bewildered. Let us remember that medical science has weathered the storms of countless political and social upheavals. It has outlived kings and emperors, dictators, monarchies, democracies and totalitarian states. It has survived prejudice, superstition, and persecution. Like life itself, which is its chief preoccupation, it is indestructible. Today, medicine is under the close scrutiny of the economists. There is no criticism of its benevolence and glory. The issue is purely an economic one.

The need for active participation of our members in civic organizations is a phase of our program which has been emphasized throughout the years of our existence. In the light of recent medical society activities the functions of our members in organizational work needs enhance-

ment. I refer particularly to the invigorated interest in matters of public health shown by practically every state and county medical society in the country: Maternal and child health work, tuberculosis, venereal disease, pneumonia, and cancer-control programs being representative of the more important. Postgraduate and refresher courses in many areas now include public meetings. The auxiliary of every district where such meetings are held may well assume the function of encouraging attendance at these meetings."

### CLASSIFIED ADVERTISEMENTS

Morphine and Other Drug Addictions—Selected patients who wish to make good and learn how to keep well; methods easy, regular, humane. 28 years' experience. Dr. Weirick's Sanitarium, 162 South State St., Elgin, Ill.

For Sale: Tice's Practice of Medicine. Up-to-date and with International Abstracts for past fifteen years. Price, \$50.00. Also nose and throat treatment table with electric suction apparatus. Property of late Dr. W. A. Wehe. Address: Journal A. D. 579.

### THE STOKES HOSPITAL

LOUISVILLE, KY.

For the treatment of

Alcoholism, Drug Addictions, Mental and Nervous Diseases

Phone Highland 2101 or Write for Rates and Folder

E. W. Stokes, Medical Director

## PROFESSIONAL PROTECTION

SINCE 1899  
SPECIALIZED  
SERVICE

### A DOCTOR SAYS:

"Yours is a type of service which gives one peace of mind and a sense of security for the future. A professional man should not risk being without this protection."

THE

**MEDICAL PROTECTIVE COMPANY**

OF FORT WAYNE, INDIANA

**WHEATON, ILLINOIS**

# Behind MERCUROCHROME

(dibrom-oxymercuri-fluorescein-sodium)



*is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association



A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

Hynson, Westcott & Dunning, Inc.  
BALTIMORE, MARYLAND

## Ambulance Service

To which you may  
trust your most  
gravely ill patient

•

NEW AMBULANCES  
TWO TRAINED ATTENDANTS

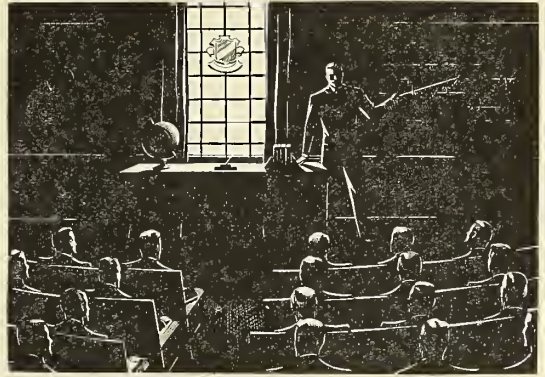
•

Rates: 15c a mile to any point in Kansas—  
everything included

WALL-DIFFENDERFER  
MORTUARY

Topeka,  
Kansas.

723 West 6th  
Phone 3-2326



## EDUCATION

Physicians who teach correct bowel management to their patients will appreciate the value of the new "Habit Time" booklet as a means of impressing patients with the importance of bowel regularity.

"Habit Time," written for doctors' patients in a clear, interesting style, embraces a discussion on diet, exercise and bowel regularity, in addition to a simple explanation of the functions of digestion.

"Habit Time," illustrated by Tom Jones, celebrated anatomical artist, has been reviewed and found satisfactory by the Council on Pharmacy and Chemistry of the American Medical Association. It is offered, free, by Petrolagar as an aid to doctors.

Petrolagar Laboratories, Inc. • Chicago, Ill.

Petrolagar . . . Liquid petrolatum  
65 cc. emulsified with 0.4 Gm. agar  
in a menstruum to make 100 cc.





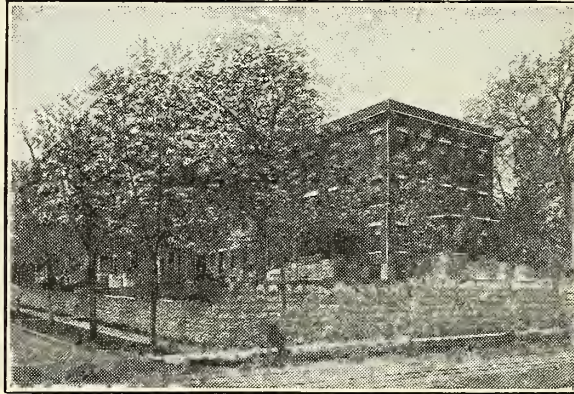
# THE MAJOR CLINIC

3100 Euclid Avenue, Kansas City, Missouri

HERMON S. MAJOR, M. D.  
Medical Director

HENRY S. MILLETT, M. D.  
Associate Medical Director

Electricity  
Heat  
Water  
Light  
Exercise  
Massage  
Rest  
Diet  
Medicine



Nervous  
Diseases  
Selected  
Mental  
Cases.  
Alcohol  
Drug and  
Tobacco  
Addictions

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.

## THE Lattimore Laboratories

TOPEKA, KANSAS

J. L. Lattimore, M. D. Director

A. C. Keith, B. S. Chemist

Allen Gold, M.A., M.T.

H. C. Ebendorf, M. T.

**We invite consultation about the case that needs pathological service.**

**Freidman test \$5.00; Rabies treatment \$10.00; Wassermann-Kahn \$2.00**

*Containers furnished upon request.*

### OFFICES:

**Topeka, Kansas    El Dorado, Kansas    Sedalia, Mo.    McAlester, Okla.**

✓

**THE JOURNAL**  
OF THE  
**KANSAS MEDICAL SOCIETY**

---

Published Monthly by  
**THE KANSAS MEDICAL SOCIETY**

---

Index to Volume XXXIX  
January 1938, to December 1938, inclusive



# INDEX TO VOLUME XXXIX

## ORIGINAL SCIENTIFIC ARTICLES

Abscess Localized at Umbilicus, Appendiceal—Maurice A. Walker, M. D., and Glenn R. Peters, M. D., Kansas City, Kansas.....	468
Abscess, Lung—Harold W. Palmer, M. D., Wichita, Kansas.....	457
Appendix, Mucocoele Of The—Paul E. Craig, M. D., and Charles H. Fortner, M. D., Coffeyville, Kansas.....	92
Back Pain, The Treatment of Low—M. E. Pusitz, M. D., Topeka, Kansas.....	98
Biopsy, Diagnosis By—M. L. Jones, M. D., Wichita, Kansas.....	111
Blennorrhoea, Inclusion—George F. Gsell, M. D., Wichita, Kansas.....	264
Breast, Carcinoma Of The—W. M. Mills, M. D., Topeka, Kansas.....	110
Cancer Of The Prostate Seminal Vesicles—Testes—O. W. Davidson, M. D., Kansas City, Kansas.....	473
Cancer Of The Stomach—G. A. Westfall, M. D., Halstead, Kansas.....	342
Cancer, X-Ray Treatment of Breast—Arthur K. Owen, M. D., Topeka, Kansas.....	111
Carcinoma Of The Large Intestine—V. E. Chesky, M. D., Halstead, Kansas.....	386
Carcinoma Of The Lung, Primary—Aaron Arkin, M. D., Chicago, Illinois.....	369
Carcinoma Of The Lung, Primary—Thomas G. Orr, M. D., and Harry R. Wahl, M. D., Kansas City, Kansas.....	432
Case Report—W. T. Grove, M. D., Liberal, Kansas.....	389
Cervix With Special Reference To Carcinoma Prophylaxis, Post-Partum Care Of The—Ray A. West, M. D., Wichita, Kansas.....	285
Cevitamic Acid In The Treatment Of Whooping Cough, A Preliminary Report of—E. L. Vermillion, M. D., and George E. Stafford, M. D., Salina, Kansas.....	469
Cold, Treatment Of The Common—Lyle S. Powell, M. D., Lawrence, Kansas.....	344
Coronary Circulation, Observations On The Physiology And Pharmacology Of The—A. M. Ginsberg, M. D., Kansas City, Missouri, and O. O. Stotland, Ph. D., Lawrence, Kansas.....	193
Cycloplegia, Action Of Eserine Administration During Homatropine-Benzedrine—Lyle S. Powell, M. D., Lawrence, Kansas, and Marshall E. Hyde, M. D., Osawatomie, Kansas.....	57
Cycloplegia, The Effects Of Benzedrine Sulfate Solution On—Lyle S. Powell, M. D., Lawrence, Kansas, and Marshall E. Hyde, M. D., Osawatomie, Kansas.....	1
Cycloplegics, Mydriatics And Miotics—Lyle S. Powell, M. D., Lawrence, Kansas.....	330
Diabetic, Surgery In The—Clyde Wilson, M. D., Emporia, Kansas.....	465
Drug Therapy, Modern—Robert M. Isenberger, M. D., Kansas City, Kansas.....	8
Ear Abscess, Pneumococcus Septicemia Following A Middle—Charles T. Moran, M. D., Arkansas City, Kansas.....	303
Ear Conditions, Differential Diagnosis Of—H. L. Kirkpatrick, M. D., Topeka, Kansas.....	63
Edema, Nephritic—Robert Jeffries, M. D., Atchison, Kansas.....	516
Electrocardiograph, The—Fred J. McEwen, M. D., Wichita, Kansas.....	462
Empyema, Bilateral Streptococcic—George B. Kent, M. D., and Kenneth C. Sawyer, M. D., Denver, Colorado.....	379
Encephalitis Lethargica As a Sequela to Measles, The Use of Benzedrine Sulphate in a Case of—A. J. Revell, M. D., Pittsburg, Kansas.....	505
Erysipeloid, X-Ray Treatment Of—Maurice A. Walker, M. D., and Lewis G. Allen, M. D., Kansas City, Kansas.....	383
Fecal Fistula, Post-Operative—Maurice A. Walker, M. D., and Herbert H. Hesser, M. D., Kansas City, Kansas.....	382
Fractures Of The Lower Margin Of The Orbit—A. C. Eitzen, M. D., Hillsboro, Kansas.....	15
Fractures of the Metacarpals and Phalanges—Charles K. Wier, M. D., Wichita, Kansas.....	501
Gangrene Of The Abdominal Wall, Progressive Postoperative—A. E. Hiebert, M. D., Wichita, Kansas.....	45
General Practice, Psychiatry In—I. Gilbert Little, M. D., Wichita, Kansas.....	47
Head, Gunshot Wound Of The—Cyril V. Black, M. D., Pratt, Kansas.....	464
Heart Disease, The Case History In—Philip Morgan, M. D., Emporia, Kansas.....	239
Heart, Roentgen Kymographic Study Of The—G. M. Tice, M. D., Kansas City, Kansas.....	198
Hemiplegia—Louis J. Karnosh, M. D., Cleveland, Ohio.....	281
Hemorrhage From Benign Prostatic Enlargement, Uncontrollable—W. M. Mills, M. D., and O. R. Clark, M. D., Topeka, Kansas.....	12
Hoarseness—Harold W. Powers, M. D., Topeka, Kansas.....	413
Hypertension and Cardio-Vascular Disease, Essential—Aaron Arkin, M. D., Chicago, Illinois.....	418
Hypertension, Malignant—Maurice Snyder, M. D., Salina, Kansas.....	4
Hyperthyroidism, Diagnosis and Management Of—Paul E. Craig, M. D., Coffeyville, Kansas.....	292
Internal Medicine, Diagnostic Errors In The Field Of—J. M. Porter, M. D., Concordia, Kansas.....	420
Jaundice (Hyperbilirubinemia) In Patients With Atrophic Arthritis, Induced Non-Toxic—Harry E. Thompson, M. D., and Bernard L. Wyatt, M. D., Tucson, Arizona.....	327
Milk As A Source Of Vitamin G—W. H. Riddell, Ph. D., Manhattan, Kansas.....	196
Mononucleosis, Infectious—M. Bernreiter, M. D., Kansas City, Kansas.....	513
Mydriasis, Observations On The Action Of Benzedrine Sulfate Ophthalmic Solution Used Alone In The Production Of—Lyle S. Powell, M. D., Lawrence, Kansas, and Marshall E. Hyde, M. D., Osawatomie, Kansas.....	434
Nervous System, Malignancy Of The Central—Donald F. Coburn, M. D., Kansas City, Missouri.....	300
Ophthalmia Neonatorum—Lyle S. Powell, M. D., Lawrence, Kansas.....	19
Osteomyelitis Of The Pelvis, Pyogenic—Robert C. Jeffries, M. D., Atchison, Kansas.....	417
Pharmacists, Educational Requirements For—L. D. Havenhill, Ph. M., Lawrence, Kansas.....	201
Paredrine Hydrobromide Ophthalmic Solution, Observations on the Action of—Lyle S. Powell, M. D., Lawrence, Kansas, and Marshall E. Hyde, M. D., Osawatomie, Kansas.....	525
Pregnancy, Appendicitis Associated With—A. W. Fegty, M. D., Wichita, Kansas.....	508
Schizophrenia, The Use Of Metrazol In The Treatment Of—Ralph M. Fellows, M. D., and Marshall E. Hyde, M. D., Osawatomie, Kansas.....	244
Squint—Byron J. Ashley, M. D., Topeka, Kansas.....	62
Surgery, II, Use of Barbiturates In—Maurice A. Walker, M. D., Glenn R. Peters, M. D., and P. E. Hiebert, M. D., Kansas City, Kansas.....	383
Syphilis, Congenital—Donald N. Medearis, M. D., Kansas City, Kansas.....	372
Syphilis Control In Sedgwick County—J. V. Van Cleve, M. D., and Clyde Miller, M. D., Wichita, Kansas.....	254
Syphilis Diagnosis And Therapy, Cardiovascular—Aaron Arkin, M. D., Chicago, Illinois.....	325
Testicle, Rhabdomyosarcoma Of The—M. Gerundo, M. D., and W. W. Corwin, M. D., Topeka, Kansas.....	95

# INDEX TO VOLUME XXXIX

Thyroid, Cancer Of The—Alfred O'Donnell, M. D., Ellsworth, Kansas .....	206
Thyroid Saga, A—L. S. Nelson, M. D., Salina, Kansas.....	90
Tinted Lenses, The Value Of—Lyle S. Powell, M. D., Lawrence, Kansas .....	108
Tonsillar and Peritonsillar Infections—Hal Marshall, M. D., Wichita, Kansas .....	208
Tuberculin Survey Of School Children In Sedwick County—Floyd C. Beelman, M. D., Wichita, Kansas.....	333
Tuberculosis, Minimal Case Finding In Pulmonary—C. F. Taylor, M. D., Norton, Kansas.....	52
Tuberculosis, Roentgen Diagnosis Of Pulmonary—C. H. Warfield, M. D., Wichita, Kansas.....	210
Tularemia—Report Of Three Cases—H. B. Melchert, M. D., Council Grove, Kansas.....	288
Tumor, Glomic—W. M. Mills, M. D., Topeka, Kansas.....	506
Tumors, Bone—C. A. Hellwig, M. D. and C. H. Warfield, M. D., Wichita, Kansas.....	303
Tumors, The X-Ray Diagnosis Of Bone—C. H. Warfield, M. D., Wichita, Kansas .....	263
Vaccination, The Negative Phase Of Typhoid—Michele Gerundo, M. D., Topeka, Kansas.....	376
Von Recklinghausen's Disease Or Neurofibromatosis, Involving Cranial and Peripheral Nerves, Case Of—M. Gerundo, M. D., and W. W. Corwin, M. D., Topeka, Kansas.....	250
Vulva, Vagina and Cervix, Carcinoma of the—R. A. West, M.D., Wichita, Kansas .....	521
Wharton's Duct, Salivary Calculus—W. W. Reed, M. D., Topeka, Kansas .....	203

## EDITORIALS

Anemia of Middle Aged Women, Achlorhydric Hypochromic.....	385
Assessment, Special.....	385
Autopsy in General Practice, The Role of.....	429
Conception In A Watch Glass.....	19
Dues .....	61
Education, Health .....	61
Education Needed .....	519
George M. Gray—A Tribute.....	339
Hear Sickness.....	341
Insurance, Cheap.....	61
Journal Changes .....	17
Medicine, Publicity In.....	107
Medicine Under the New Deal.....	430
Medical Assistance in Kansas.....	299
Meeting, The A. M. A.....	205
Meeting, U. S. P. H. A.....	471
New President, The.....	167
Officers, County Society .....	519
Opinion, Supreme Court.....	257
Organization Trends .....	206
Philosophy, The Need For A.....	17
President-Elect, The.....	205
Retiring President, The.....	165
Session, Annual.....	205
Session, 79th Annual .....	167
Session, The Special.....	429
Surveys? Why .....	107
Thirty-one Years After .....	472
Tuberculosis, The Treatment of .....	520
Women's Field Army And The Physician, The.....	18

## DEATH NOTICES

Beach, Warren Buckland, Delphos.....	490
Beatson, Lachlan, MacLean, Arkansas City.....	80
Callender, Charles Jason, Anthony .....	538
Cabeen, Robert Jackson, Leon.....	232
Crisler, Marcus P., Hardtner.....	232
Cummings, James Scott, Bronson.....	450
Hall, John Crawford, McPherson.....	232
Hammer, John Elmer, Kiowa.....	80
Horner, Thomas Edward, Atchison.....	80
Jacobus, Leon A., Winfield.....	232
Kaiser, Charles H., Hillsboro.....	38
Kennedy, Harvey Leander, Ottawa.....	80
Little, James Melvin, Sterling.....	80
McCurdy, Robert Allen, ElDorado.....	38
McIrvin, Will Cantwell, Atwood.....	234
Martin, Emanuel N., Clay Center.....	38
Matz, Philip Benjamin, Leavenworth.....	450
Mayer, Henry C., Junction City.....	450
Morrison, Elmer E., Great Bend.....	80
Morrison, Virgil, Atchison.....	38
Nye, Willard W., Hiawatha.....	490
Parker, Lynn H., Parsons.....	38
Pine, Walter Frederic, Dodge City.....	80
Salthouse, Henry L., McPherson.....	234
Saylor, John Harvey, Marion.....	490
Slosson, Emily Brooke, Sabetha.....	234
Smith, George Sylvester, Liberal.....	490
Smith, Henry Darwin, Washington.....	362
Statz, J. Harvey, Bushton.....	318
Tufts, Edwin Anderson, Arkansas City.....	490
Vickers, John L., Wichita.....	234
Ward, Charles E., Little River.....	234
Warner, Terry W., Parker.....	80
Wear, Robert C., Baxter Springs.....	452
Wehe, William Adam, Topeka.....	452
Youngs, William Edward, Independence .....	538

## SPECIAL ARTICLES

Academy, Shawnee County.....	25
Act, Pure Food and Drug.....	13
Address, New .....	28
Address, President's.....	237
American College of Physicians .....	532
Annual Session .....	536
Appointments .....	310
Appointment, New .....	26, 532
Army Medical Library.....	310
Assessment, Special.....	438
Association, K. U. Endowment.....	116
Association, Tuberculosis.....	26
Board Of Medical Registration.....	116
Board Of Registration.....	438
Board Of Registration And Examination.....	24
Books, Library.....	69, 232
Brinkley, Dr. John R.....	490
Brochure, Cancer.....	68
Brochure, Venereal Disease.....	486
Brown, Dr. Earle G.....	115



# INDEX TO VOLUME XXXIX

Bulletins .....	118
Cancer Control .....	24
Comment .....	530
Committee, New .....	356
Committees .....	28, 116, 272
Conference, Chairmen's .....	404
Conference, Committee .....	356
Conference, K. C. Clinical .....	358
Conference, Northwest .....	115
Cooper Case .....	228
Cooperation Between The State Medical And Pharmacy Boards .....	55
Course, Cancer .....	439
Courses, Medical Economics .....	69
Course, Neuropsychiatry .....	70
Course, Postgraduate .....	28, 68, 114, 316, 408, 482, 536
Course, Venereal Disease .....	230
Dressler, Dr. Wilhelm .....	26
Dues .....	530
Education, Lay .....	68
Education, Study Of Graduate .....	25
Election .....	482
Exhibit, Scientific .....	482
Findings, Committee .....	65
Indigent Care .....	25, 68, 228, 530
Indigent Medical Care .....	439
International Medical Assembly .....	438
Jaffe, Dr. R. H. .....	28
Kansas City Southwest Clinical Society .....	404
Kansas Tuberculosis Association, Aiding The Work Of The .....	112
Health, Hall Of .....	26, 69, 116
Health, Halls Of .....	308
Health, State Board Of .....	26, 310
Laboratory, Hixon .....	69
Legislation .....	114
Legislature .....	438
Licensees, New .....	356
Litigation, Osteopathic .....	23
Location .....	316, 358
Locations .....	490
Medical Research .....	486
Meeting, 1938 .....	25, 530
Meeting, A. M. A. .....	310
Meeting, A. P. H. A. .....	439
Meeting, Cancer .....	116
Meetings, Committee .....	408, 440, 484, 532
Meeting, Cosmetology .....	26
Meeting, Council .....	23, 308, 356
Meeting, District .....	24, 68
Meeting, Excursion To A. M. A. .....	228
Meeting, House Of Delegates .....	446
Meeting, Joint .....	26
Meeting, The Annual A. P. H. A. .....	316
Meeting, San Francisco A. M. A. .....	72
Meeting, Special .....	391
Meeting, 1938 Trap And Skeet .....	70
Meeting, Tuberculosis .....	438
Minutes, Council .....	72
Mother's Manual .....	437
Movies, Medical .....	115
N. Y. A. .....	532
Official Call .....	228
Opinion, Cooper .....	274
Organization, County .....	532
Organization, District .....	482
Osteopaths .....	114, 228, 308, 437, 479
Osteopathy .....	349, 391
Pamphlet, Syphilis .....	316
Pamphlets .....	232, 488
Physician, Prison .....	26
Plan, The Douglas County .....	347
Plan, The Ford County .....	268
Plan, The Saline County .....	349
Plan, The Sedgwick County .....	305
Porter Lecture .....	232

Prizes, Golf And Trap .....	358
Program, Blind .....	230, 310, 484
Program, Cancer .....	356
Program, National Health .....	408
Program, Tuberculosis .....	115, 230
Program, Why A Cancer Educational Program .....	64
Report, Indigent .....	308
Reporting, Venereal Disease .....	439
Research .....	532
Resignation .....	72
Sales Tax, Hospital .....	230
Sales Tax On Optical Supplies .....	230
Session, The Seventy-Ninth Annual .....	114
State vs. Cooper .....	25
Supplement, Medical .....	530
Survey, A. M. A. .....	310, 481, 534
Survey, Indigent .....	115
Tax, Income .....	69
Technicians .....	232
The Doctor Now In A Permanent Home .....	310
Tours .....	69, 115
Treatment, Blind .....	68

## PRESIDENT'S PAGE

16, 60, 106, 164, 204, 256, 298, 338, 384, 428, 470, 518.

## TUBERCULOSIS ABSTRACTS

21, 348, 390, 435, 477

## MEDICAL ECONOMICS

22, 67, 113, 268, 306, 345, 475, 527.

## ANNOUNCEMENTS

32, 80, 124, 318, 362

## COUNTY MEDICAL SOCIETIES

34, 76, 122, 318, 360, 492, 536.

## MEMBERS

34, 78, 124, 318, 360, 452, 486, 536.

## NEW BOOKS RECEIVED

84, 324, 366

## BOOK REVIEWS

362, 492, 538.

## KANSAS MEDICAL AUXILIARY

38, 80, 126, 234, 320, 410, 452, 496, 538.

## MISCELLANEOUS

Annual Session, 79th .....	
Alumni Banquets .....	150
Annual Banquet and Dance .....	150
Birth Of A Baby, The .....	161
Calling All Golfers and Shooters .....	158
Eye, Ear, Nose and Throat .....	161
Forum, The Wichita .....	146
Golf Tournament .....	158
Hall Of Health .....	148
Hotel Accommodations .....	154
House Of Delegates .....	147
Kansas State Hospital Association, The .....	150
Page Service .....	147
Registration .....	146
Round Table Luncheons .....	157
Schedule Of Events .....	134
Scientific Exhibits .....	151
Secretaries Luncheon .....	147
Sedgwick County Committees .....	147
Skeet Tournament .....	159
Speakers .....	141
Stag Banquet .....	161
Technical Exhibits .....	155
Tournament Trophies .....	159
Visiting Women's, Schedule Of Events .....	162
Official Proceedings .....	168, 211